Agricultural Policy Action Plan 2014-19

agriculture,
forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

20 YEARS OF FREEDOM

AGRICULTURAL POLICY ACTION PLAN (APAP)

2014-2019

CONFIDENTIAL



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1. EXECUTIVE SUMMARY

Agriculture, Forestry and Fisheries (AFF) are widely recognised as sectors with significant job creation potential and with strategic links to beneficiation opportunities. However, although between 1994 and 2012 the real contribution of AFF to GDP increased by 29%, over the same period employment declined in both primary production and agro-processing by about 30% to 40%. This combination of slow-to-modest growth and declining employment, continues a longer-term trend evident since at least the 1970s. The challenges facing AFF are numerous: rising input costs, an uneven international trade environment, lack of developmental infrastructure (rail, harbour, electricity), and a rapidly evolving policy and production environment. At the same time, transformation of the AFF sectors has been slow and tentative.

While there have been a variety of sector strategies established in the past, and while some progress has been made, there is recognition of a need to sharpen our analysis of what accounts for sluggish growth and job losses in AFF, and of what is required to reverse this trend. At the same time, it is recognised that while the Agriculture, Forestry and Fisheries sectors play various strategic roles in respect of food security, agrarian transformation and rural development, and in supporting industrial development, it is also the case that AFF is under-funded: according to National Treasury's estimates of consolidated government budgets and expenditure ('functional classification'), the share of public money going to agriculture, forestry and fisheries has been at around 1,7% over the past four years, and is expected to decline to 1,6% over the next two. The OECD recognises South Africa's agriculture sector as among the least supported in the world: South Africa's Producer Support Estimate is currently 3,2%, versus 4,6% for Brazil, 7,1% for the US, and 18,6% for the OECD. Of particular concern is the lack of attention to R&D: according to the 2009/10 R&D survey conducted by HSRC on behalf of the Department of Science and Technology (the most recent survey for which the results are available), agriculture accounted for only 6,9% of South Africa's total R&D spend. This state of affairs can in part be explained by the absence of a compelling, widely-supported strategy and implementation plan.

A detailed analysis of the various challenges is given in the Integrated Growth and Development Policy for Agriculture, Forestry and Fisheries, or 'IGDP'. Based on this analysis, the IGDP also outlines appropriate responses. The Agricultural Policy Action Plan (APAP) seeks to translate the high-level responses offered in the IGDP, into tangible, concrete steps. However, this first iteration of APAP is not offered as a fully comprehensive plan; rather, based on the model of the Industrial Policy Action Plan ('IPAP'), it identifies an ambitious but manageable number of focused actions, in anticipation of future APAP iterations that will take the process further. APAP is planned over a five-year period and will be updated on an annual basis. Aligning itself with the New Growth Path (NGP), the National Development Plan (NDP) and Industrial Policy Action Plan (IPAP), APAP seeks to assist in the achievement of Outcome 4, Decent Employment through Inclusive Growth, and that of Outcome 7, Comprehensive Rural Development and Food Security.



This document is organised as follows:

- Chapter 2 describes the policy context and arguments presented in key guiding documents such as the New Growth Path (NGP), the National Development Plan (NDP) and Industrial Policy Action Plan (IPAP).
- Chapter 3 offers the over-arching problem statement by way of an economic analysis of growth and employment trends within the three sectors. Each of the three sectors has its own issues and dynamics, with the common threads being a tendency towards greater capital intensity in both primary production and processing/beneficiation, high levels of concentration in beneficiation subsectors, and an inadequate pace of transformation.
- Chapter 4 briefly recaps the main response areas outlined in the IGDP, namely Equitable growth and competitiveness; Equity and transformation; Environmental sustainability; and Governance.
- Chapters 5 and 6 present the main 'actions' of the Agricultural Policy Action Plan; Chapter 5 focuses on the 'sectoral interventions' that concern selected subsectors/value chains, while Chapter 6 covers APAP's initial 'transversal interventions', meaning those actions which will support multiple subsectors, e.g. by means of addressing common constraints or addressing core competencies.
- Lastly, the document describes in Chapter 7 the implementation management, monitoring and evaluation processes of APAP, ensuring that it remains an action plan addressing binding constraints and key challenges in creating decent employment and an inclusive rural economy.

2. POLICY FRAMEWORK

APAP aligns itself to the New Growth Path (NGP), the National Development Plan (NDP), and the Medium Term Strategic Framework in respect of Outcomes 4, 7 and 10. This is illustrated schematically in the figure below, and detailed in the paragraphs that follow.

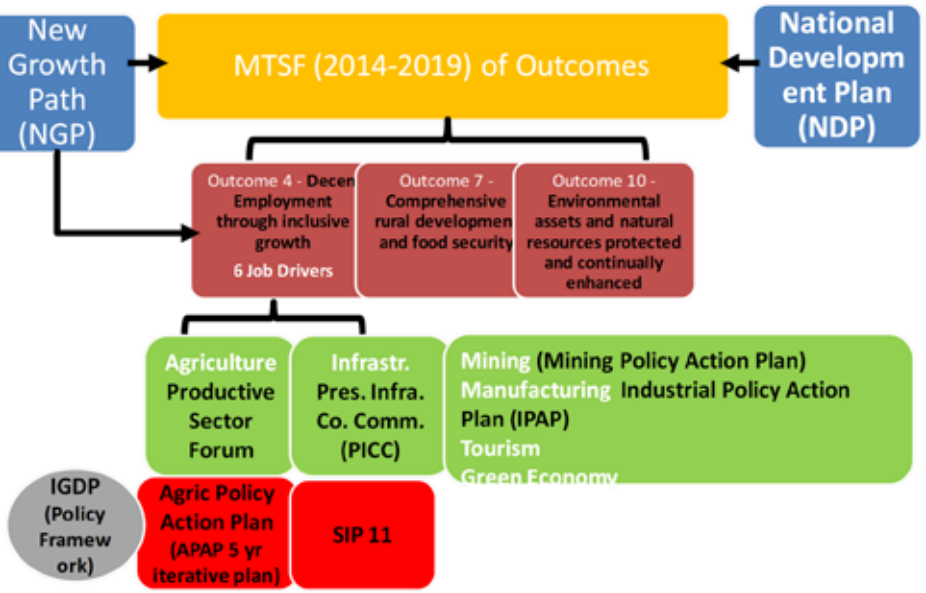


Figure 1: APAP alignment with NGP, NDP and MTSF

New Growth Path (NGP)

The New Growth Path (NGP) is South Africa's vision to place jobs and decent work at the centre of economic policy. It sets a target of five million additional jobs by 2020, and sets out the key employment drivers and the priority sectors that the country will focus on over the medium term.

The NGP seeks to shift the economy towards strong, sustained, and inclusive economic growth with an emphasis on the rebuilding of the productive sectors of the economy. Infrastructure development and agriculture, in particular, have been identified as a foundation for more jobs and addressing rural underdevelopment. The NGP set targets of increasing the smallholder sector by 300 000 households, ensuring 145 000 additional jobs in agro-processing, and upgrading conditions for 660 000 farm workers.

The NGP provides the following broad policy guidelines for agriculture, forestry and fisheries:

- Restructuring of land reform to support smallholder schemes with comprehensive support around infrastructure, marketing, finance, extension services, etc.
- Upgrading employment in commercial agriculture, especially through improved worker voice
- Measures to support growth in commercial farming and to help address fluctuations in maize and wheat prices, while supporting national food security
- Acceleration of land claims processes and better support to new farmers following restitution settlements
- Programmes to ensure competitive pricing of inputs, especially fertiliser
- Support for fishing and aquaculture.

National Development Plan (NDP)

The National Development Plan (NDP) calls for an inclusive rural economy wherein rural areas are spatially, socially and economically well integrated and coordinated, and where residents are economically active and food secure, while having improved access to basic services, health care and quality education. By 2030 agriculture should create close to 1 million new jobs, contributing significantly to reducing overall unemployment.

Achieving this vision will require leadership on land reform, communal tenure security, rural social and physical infrastructure, financial and technical support to farmers, and capacity building to enable state institutions and private industries to implement these interventions. Improved coordination and integration in the planning and implementation of area-based and differentiated rural development programmes will be needed over the medium-term to achieve the stated vision of an inclusive rural economy.

Medium Term Strategic Framework (MTSF)

The first cycle (i.e., 2014 - 2019) of this Medium Term Strategic Framework (MTSF) for the rural sector will focus primarily on seven imperatives that are a core foundation for an inclusive and integrated rural economy, as follows:

- Improved land administration and spatial planning for integrated development, with a bias towards rural areas
- Improved and sustainable agrarian reform and food security
- Smallholder farmer development and support (technical, financial, infrastructure)
- Increased access to quality basic infrastructure and services, particularly in education, healthcare and public transport
- Sustainable rural enterprises and industries characterised by strong rural-urban linkages, increased investment in agro-processing, trade development and access to markets and financial services
- Reduce rural unemployment
- Improved integration and coordination of rural development across all spheres of government and between government departments as a result of implementation of synchronised rural development strategies.

To achieve the seven imperatives as listed above, and due to the potential for job creation envisaged through agriculture, there is a need for a clear direction and a consistent focus on four aspects during 2014 – 2019, namely:

- Provision of comprehensive support to smallholders to ensure increased productivity
- Investment in agro-processing to enhance job creation
- Trade development and market access through harmonization of agricultural policies and targeted support to strategic initiatives
- Sustainable management of natural resources.

For subsequent cycles, the rural sector as a whole will focus on the following:

- Leveraging on established institutional arrangements and spatial planning tools and instruments to further advance effective urban-rural integration
- Strengthening development planning based on effective spatial development frameworks at all three spheres to further unlock benefits in agricultural, forestry and fisheries value chains, and
- Up-scaling implementation towards achieving concrete targets in the relevant sectors.

3. PROBLEM STATEMENT

3.1 Introduction

The agriculture, forestry and fisheries sectors have a number of commonalities: they are each based on renewable resources which require careful management; they each contribute significantly to the agro-processing sector; they each operate in highly competitive and uneven international markets; and each is characterised by a wide range of producers, from very large to very small.

However, they also face distinct challenges and offer diverse opportunities. Agriculture has undergone enormous structural changes such that it has tended on the whole to lose jobs rather than gain them; fisheries is facing depleted stocks of marine and coastal wild capture fisheries, but shows enormous potential in terms of aquaculture; and forestry is constrained by stringent water regulations, under-investment in long-rotation sawlog plantations, and the need to find a strategic, coordinated approach involving the State, the private sector, restitution communities, and the forestry parastatal, SAFCOL.

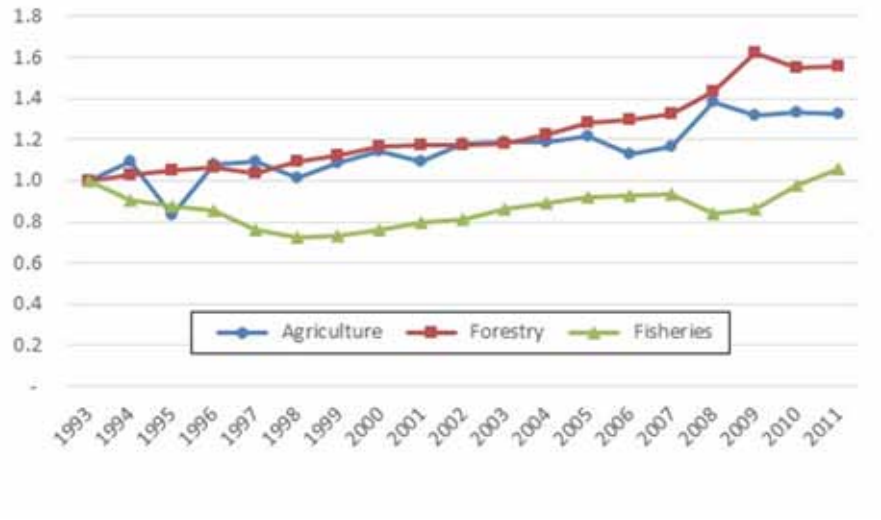


Figure 2: Real value added in agriculture, forestry and fisheries, 1993-2011 (1993=1) Source: Stats SA 2012

3.2 Primary agriculture

Between 1950 and the present, the number of commercial farming units in primary agriculture has declined from almost 120 000 to around 40 000. This decline has been remarkably steady, and has been accompanied by a commensurate increase in average farm size, and a change in the technology mix on farms. In short, as farms grow larger, they tend to rely less on labour and more and capital and chemical inputs. While different agricultural subsectors have distinct characteristics, the overall trend has been one of job loss, both in terms of regular/permanent jobs, and casual and seasonal jobs. Although between the 3rd quarter of 2011 and the 1st quarter of 2013 there was a noticeable increase in farm jobs, it is doubtful that this represents a real turnaround in the longer term trend.

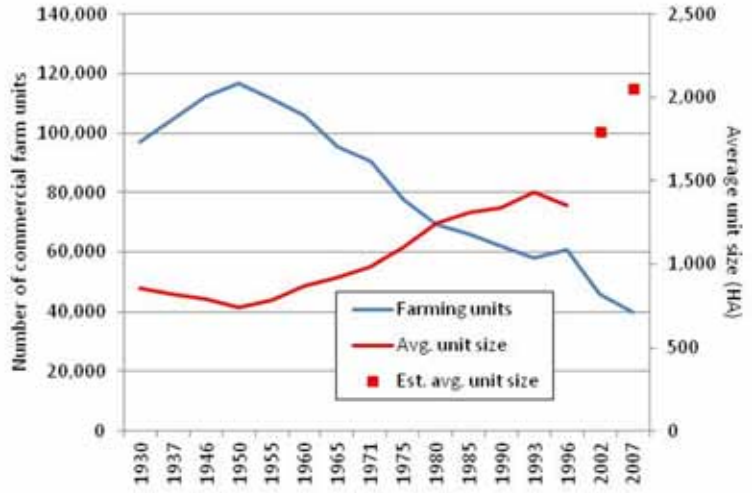


Figure 3: Long-term trends in number of farm units and average farm size
Source: Stats SA, misc.

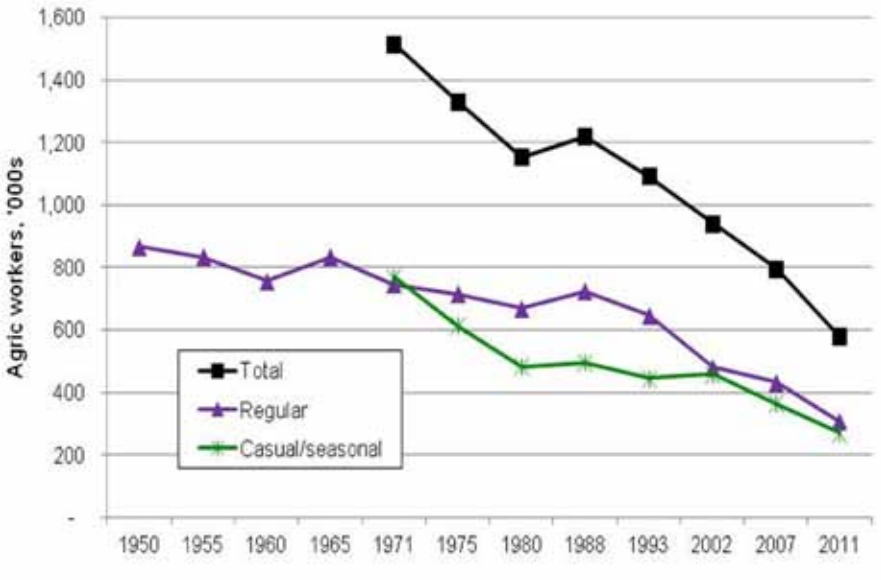


Figure 4: Long-term trends in farm employment

Source: Stats SA, misc.

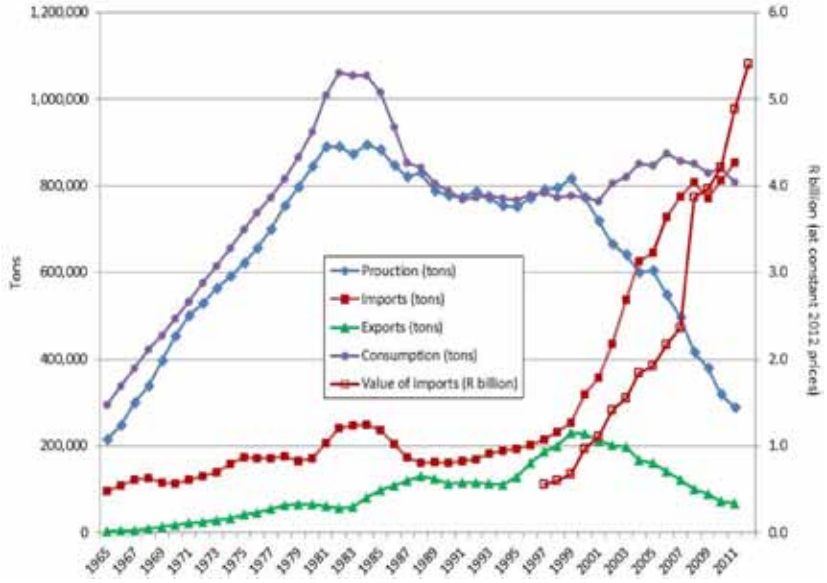


Figure 5: Fertiliser production, trade and use, 1965-2011

Source: FAO Stat 2013

South Africa's pattern of increasing farm size and declining farm employment, is common to many other countries, especially developed countries. However, whereas elsewhere this phenomenon normally coincides with a growing scarcity of labour because of more attractive opportunities elsewhere, in South Africa it is happening amidst a deepening problem of rural unemployment. Reversing this trend will require a combination of strategies:

- Encouraging a shift towards more labour-intensive agricultural subsectors
- Encouraging fuller use of land within commercial farming areas, especially via conservation agriculture and land redistribution
- Strengthening the smaller stratum of large-scale commercial farms, which account for a disproportionate share of farm jobs, and
- Promoting a better balance between large-scale commercial farms and smallholder farms via land reform and development within the former homelands.

What drives average farm size to get larger over time? One of the main reasons is the declining returns per hectare, which means that for a farmer to maintain the same level of income, he/she must get larger. This in turn relates to the challenge faced by commercial agriculture in maintaining competitiveness, aggravated by the fact that since the 1990s South African farmers have not benefited from generous state subsidies as do many producers overseas.

A key reason for the erosion of competitiveness is high and rising input costs. Figure 5 illustrates one aspect of the problem, relating to fertiliser. Since around 1999, South Africa's domestic production of fertiliser started to decline appreciably, and the gap between domestic use and production has thereafter increasingly been made up by fertiliser imports, which are expensive.

In fact, South Africa's agriculture sector relies increasingly on imported agricultural inputs – not only industrial inputs such as chemical fertilisers, diesel and machinery, but also ingredients for animal feed.

In many years, the value of imported fertiliser, diesel and machinery exceeds the value of agricultural net exports, meaning that even though agriculture may appear to make a positive contribution to the trade balance, this is not necessarily the case. In Figure 6, wherever the trend line rises above the horizontal line at 100%, the value of imported fertiliser, diesel and machinery more than negates the surplus of agricultural exports over agricultural imports, and this appears to be happening with increasing frequency. Years in which the value of imported agricultural inputs is especially high relative to agricultural net exports (1992, 1995, and 2007) are those in which domestic production conditions were poor; typically imported farm inputs were more or less average, while agricultural net imports were especially low.

For imported animal feed ingredients, the logical response is to produce more of our own, as indeed is already happening, and which APAP proposes to continue. For the other mentioned inputs, however, an argument is now emerging that the key is to promote a shift from conventional agriculture to forms of 'climate-smart agriculture' such conservation agriculture (CA); whereas CA has long been argued on grounds of environmental sustainability and reducing production risk, another critical advantage of CA is that it can achieve the same or greater productivity but with greatly reduced industrial inputs. This will have the effect of making South African farmers more competitive by lowering input costs, while reversing the trend of agriculture's negative contribution to the trade balance.

Regarding smallholders, meaning small-scale farmers who produce for the purpose of deriving an income, there are no consistent data sources that help trace their numbers over the long term. Data available between 2009 and 2012 indicate a tentative upward trend.

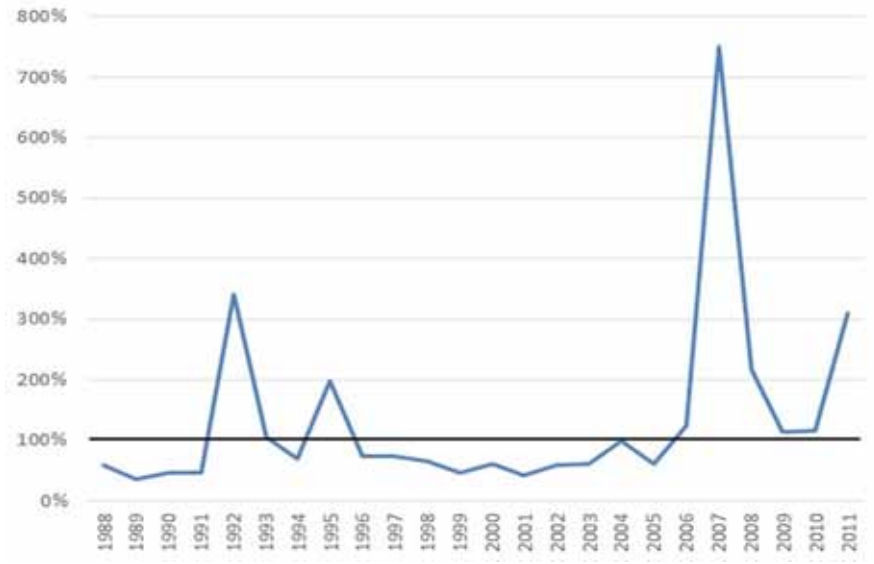


Figure 6: Value of imported agricultural inputs relative to agricultural net exports Source: DAFF 2013 and the dti

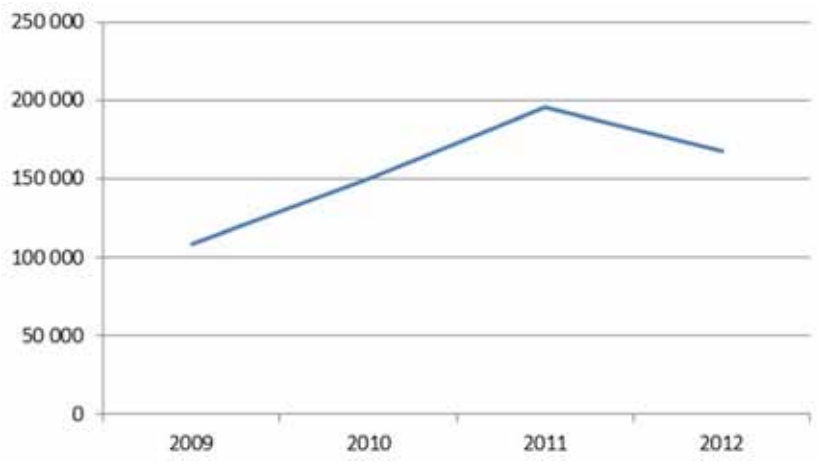


Figure 7: Estimated numbers of smallholder households, 2009-2012
Source: Stats SA, misc.

The challenge of growing the smallholder sector is closely tied up with the challenge of making smallholder agriculture more remunerative – presently, more than half of all smallholder households live below the poverty line. The footprint of government support services reaching smallholders has been improving. For instance, in 2010, only 8% of smallholders were visited by extension officers, but this had increased to 13% in 2012, despite the considerably larger number of smallholders in 2012. This momentum must be increased, and other forms of support must improve as well.

Presently, about three quarters of smallholders farm within the former homelands, and the rest are split between urban areas and commercial farming areas. There is scope to increase the size of the smallholder sector in each of these areas: in former homelands, there are hundreds of thousands of hectares of under-utilised arable land (if not more) that can be put back into production, especially with concerted support for input access, mechanisation services, technical support, and linkages to local and non-local markets; smallholders in urban and peri-urban areas are poorly supported at present, but could contribute to local vegetable production in particular; in commercial farming areas, land reform has created few smallholder opportunities to date, but has the potential to do far more.

3.3 Forestry

Although forestry contributes a modest 0,4% of GDP, it supports manufacturing subsectors such as sawmilling and paper and pulp production, as well as mining and construction. It is estimated that in 2011 there were about 63 000 jobs in commercial forestry itself, and another 52 000 in direct processing jobs.

Much of the story of commercial forestry is captured in the two figures below, which show the trends in forestry hectares by tree type and primary use. First, there has been a marked decline in both softwood and hardwood plantation hectarage since the mid-1990s. And second, there has been a marked increase in hectarage for pulpwood purposes as compared to the hectarage for sawlogs and mining.

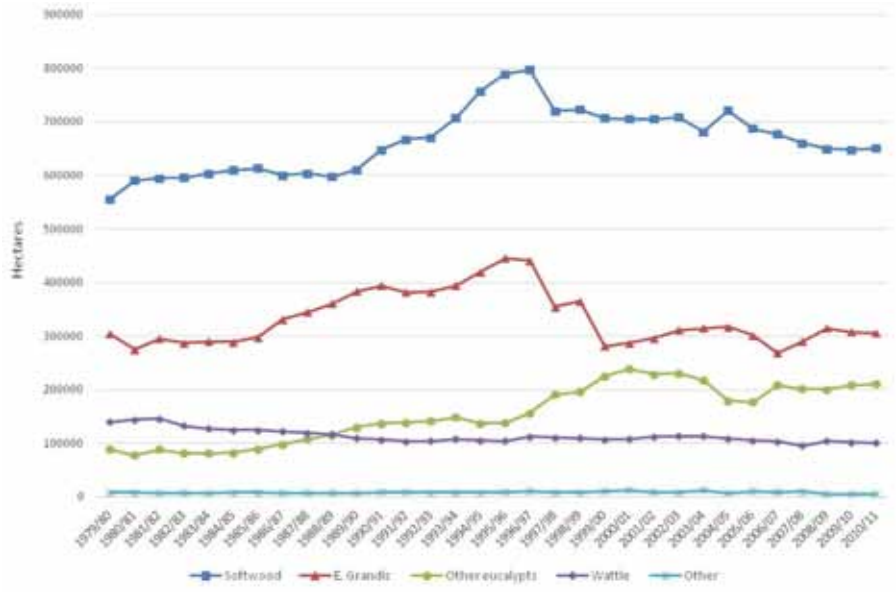


Figure 8: Commercial forestry hectarage by tree type, 1979/80 – 2010/11

Source: Forestry SA, 2012

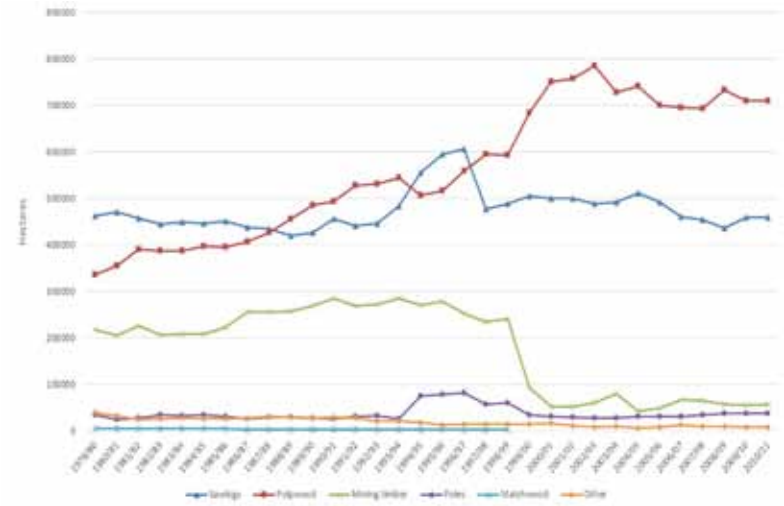


Figure 9: Commercial forestry hectarage by main use, 1979/80 – 2010/11

Source: Forestry SA, 2012

Underlying these trends are various factors, but in particular: the tighter regulatory framework governing water usage – forestry is regarded as a water diversion land use, thus permits are required to expand the area under plantation; the privatisation of much of what had been state forests, which has resulted in private sector lessees favouring shorter-term returns via pulpwood use over longer-term returns from sawlogs; and the State's poor upkeep of Category B and C plantations, which has reduced their productivity. While there is still net surplus of industry exports over imports, the margin has narrowed by 32% since 1992, and the industry predicts that South Africa will soon become a net importer, especially of sawlogs. This will likely result in significant cost increases for house construction. One subsector that has already been affected by the decline in timber supply is sawmilling, with the number of sawmills increasing from 96 to 115 between 1996 and 2004, but then declining to 90 by 2010.

The conundrum faced by the State is that on the one hand, it is felt that the privatisation (in the sense of long-term leases of state-owned plantations) of the Category A plantations has not resulted in an optimal mix between short- and long-rotation plantation types, while on the other hand, the State has not been sufficiently diligent in managing its remaining Category B and C plantations, even allowing for the fact that by definition these plantations were not as valuable to being with. While it is clear that the private sector does have excellent management capacity and has also ushered in efficiencies across the value chain, the state must still play a large role to ensure adequate levels of investment, especially for longer-rotation timber/sawlog plantations. Another piece of the puzzle is SAFCOL, a state-owned company which has successfully managed some of the state-owned forests. An option presently being considered is to shift responsibility for the Category B and C plantations from DAFF to SAFCOL, however this will require a phased approach taking into account the several thousand DAFF employees tending these plantations, and the need for recapitalisation. One other strategic question is how best to support the communities who have received ownership of plantations via the land restitution programme, and the many more who still will.

3.4 Fisheries

The fisheries sector contributes roughly 0,1% of GDP, thus is small even by the standards of agriculture. The total output is estimated at 600 000 tons worth about R6 billion. It is estimated that the direct employment in the industry constitutes approximately 27 000 jobs (16 000 in the primary sector and 11 000 in the secondary and tertiary sectors), while an additional 81 000 people are indirectly employed in industries that are at least partially dependent on the fishing industry. One of the main limitations with fisheries is that catch volumes depend on fish stocks, which vary naturally and/or are subject to depletion due to over exploitation. Inshore species especially tend to be in a state of stock depletion, because they are more easily accessed, including illegally. According to one study, 68% of commercial linefish stocks have collapsed, and another 11% are over-exploited (WWF 2011). DAFF seeks to prevent over-exploitation by means of assigning Total Allowable Catch and/or Total Allowable Effort per species, which are adjusted on a regular basis depending on the estimated state of the resource. DAFF has also sought to promote transformation in the sector by modifying its licensing regime as per the 'Policy for the Small Scale Fisheries Sector in South Africa', gazetted in 2012.

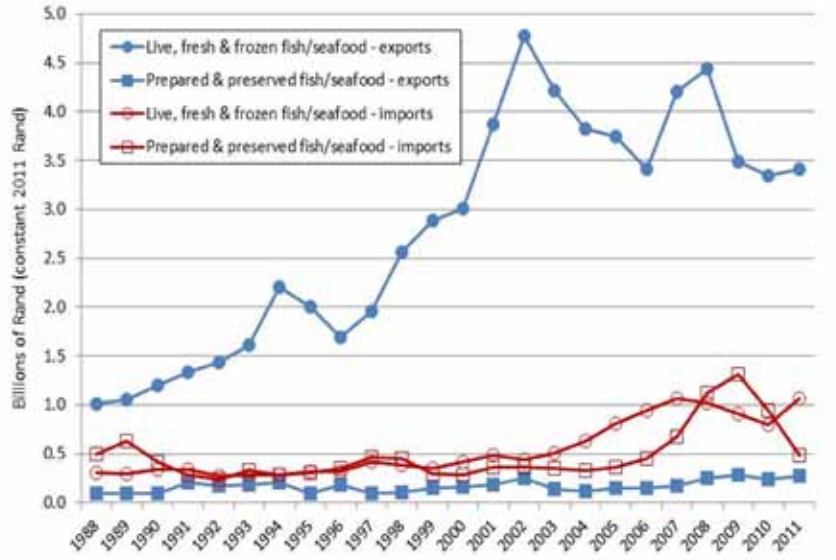


Figure 10: Exports and imports of fish and seafood, 1988-2011 (inflation adjusted) Source: the dti, 2013

The figure at right shows the trends in fisheries exports and imports, distinguishing between 'live, fresh and frozen' on the one hand, and 'prepared and preserved', on the other. Up to around 2002 there was a dramatic increase in exports of 'live, fresh and frozen' fish and seafood, possibly due to the fact that in 1977 South Africa established an Exclusive Economic Zone as a means relieving the pressure imposed by foreign-owned fishing fleets, creating space for fisheries stocks to recover, and/or for the South African industry to expand. After 2002, however, it is difficult to discern a clear trend.

While wild capture fisheries appear unlikely to expand beyond their present levels, aquaculture may well. While the marine-based 'mari-culture' part of aquaculture has been around for some years, focusing on species such as abalone, oysters and mussels, freshwater aquaculture is experiencing a rapid expansion, owing in part to government's multi-pronged aquaculture promotion strategy.

The total output of aquaculture in 2011 was 7 688 tons with a value estimated at about R0,5 billion. Growth in this sub-sector has been increasing by an average of 11,2% annually since 2010. The aquaculture sector employs more than 3000 direct jobs and another 3000 indirect jobs. This is expected to increase with the projected increase of more than 100% by 2020.

3.5 Agri-business

Agri-business comprises largely agricultural input suppliers and the agro-processing sector. Trend data for agro-processors suggests that over the past two decades it has followed a similar pattern to primary agriculture – modest real growth coupled with declines in formal sector jobs. The development trajectory of both input suppliers and agro-processors resembles that of many other countries, namely a trend towards higher levels of industry concentration. In general terms it reflects the difficult situation in which counties like South Africa find themselves: for domestic agro-processors to compete internationally, they must seek the same scale efficiencies being captured by agro-processors abroad. However, efficiency in agro-processing is not always in the best interests of primary sectors, whether those in South Africa or elsewhere.

The Competition Commission has intervened in numerous instances, particularly in those subsectors in which the high degree of concentration has tended to allow for collusion or other forms of anti-competitive behaviour. The potential for anti-competitive behaviour is problematic for both primary producers and consumers. However, even in the absence of collusion, the concentration of agro-processing subsectors, together with the adoption by supermarket chains of centralised procurement and distribution systems, has led to widening margins between farm-gate prices and consumer prices. This also mirrors the international trends.

Table 1: Concentration ratios by total income for top 5 and top 10 enterprises, 2008 Source: Stats SA 2010

	CR5	CR10
Agro-processors		
Food products and beverages	30%	40%
Prodn, processing & preserving of meat, fish, fruit, vegetables, oils & fats	30%	43%
Dairy products	71%	81%
Grain mill products, starches and starch products and prepared animal feeds	70%	79%
Bakery products, sugar, chocolate, etc.	58%	84%
Beverages	80%	86%
Textiles, clothing, leather and footwear	17%	23%
Wood, wood products, paper, publishing and printing	30%	41%
Agro-input manufacturers		
Fertilisers, nitrogen compounds, plastics and synthetic rubber	87%	92%
Agricultural and forestry machinery	23%	33%

Regarding the decline in formal agro-processing jobs since the late 1980s, it appears to be associated with the trend towards more concentration of the sector. First, as shown in Figure 11, the decline in formal agro-processing jobs coincides with a rapid increase in the real domestic fixed investment in the sector. And second, between 1970 and 2010, the food processing subsector of agro-processing has become approximately twice as capital-intensive as indicated by a doubling of the capital-labour ratio index, along with a decline of about two-thirds in the ratio in the number of jobs per unit output (Figure 12). The likelihood is that this has to do with the shift towards larger, more capital-intensive processing facilities.

It is also worth noting, however, that between 1970 and 2007, there was an increase of about 140 000 informal jobs in agro-processing, of which half has been since 1994 (Figure 11). The assumption is that these are mainly self-employment and employment opportunities in small-scale, informal sector agro-processors, such as informal abattoirs, bakeries, etc. This upward trend appears to have halted, but it does suggest the potential for smaller-scale agro-processing. What is evidently missing is a robust expansion of formal sector, small-scale agro-processing. This would have numerous benefits, including contributing to the de-concentration of the agro-processing sector – both in terms of ownership and geography – and the development of local food economies, which have the potential to create more rural employment while stimulating production in areas with under-utilised potential such as former homelands. The absence of this sector appears to relate to the high cost of capital, the inadequate take-up of the dti's various incentive schemes, and too little investment in marketing or secondary co-ops, which would be the natural hosts of many such enterprises, as well as poor or lack of infrastructure. The inference is that government needs to work more closely with the various subsectors in order to stimulate the development of this sector. The key consideration is whether the lower transport costs associated with better distributed agro-processing capacity, together with more effective coordination among primary producers, can enable such enterprises to compete with large-scale agro-processors, which often benefit from scale economies. This can only be determined on a case-by-case basis.

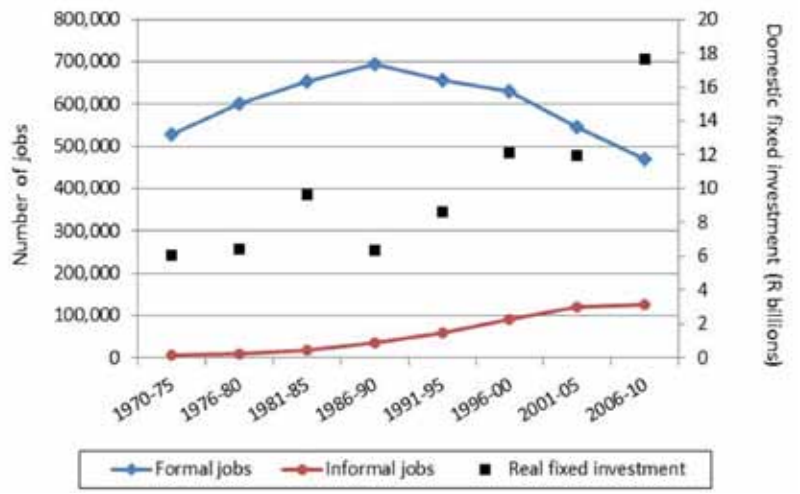


Figure 11: Trends in formal and informal employment in agro-processing, 1970-2010 Source: DAFF 2012

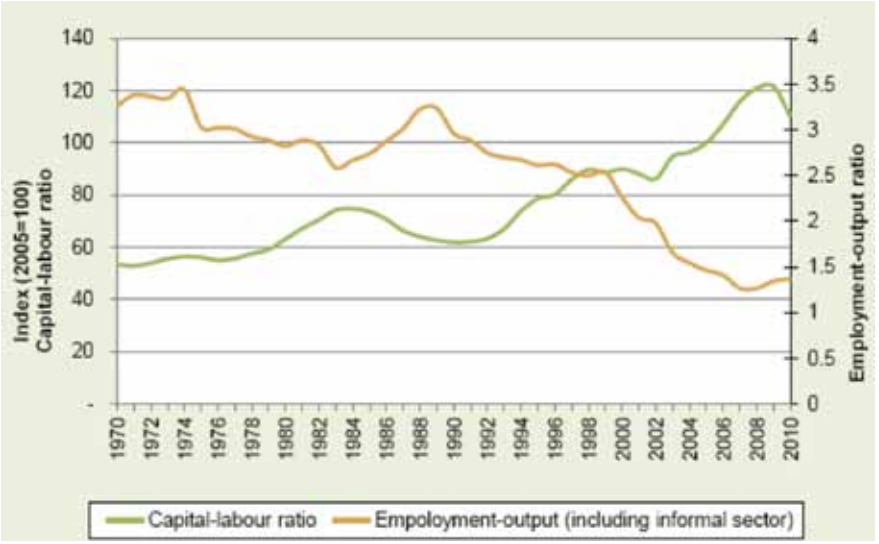


Figure 12: Capital-labour & employment-output ratios for food products, 1970-2010 Source: DAFF 2012

4. OVERVIEW OF THE RESPONSE

The sector constraints and challenges as analysed above require a response that is comprehensive and yet focused. The IGDP identifies four broad sector goals which translate into a comprehensive, abiding intervention framework, which will be supported through iterations of APAP via short- and medium-term interventions targeting specific value chains ('sectoral interventions') or transversal challenges ('transversal interventions') (see Chapters 5 and 6 for detail).

The four broad sector goals are: Equitable growth and competitiveness; Equity and transformation; Environmental sustainability; and Governance.

Equitable growth and competitiveness

The IGDP recognises that a prosperous and food secure South Africa requires that all of its farming, forestry and fisheries subsectors, large and small, are supported to become competitive and resilient. There is also a recognition, however, that we do not seek competitiveness for its own sake, but in so far as it can contribute to resolving national challenges such as unemployment, inequality and social exclusion.

Supporting agriculture, forestry and fisheries producers/enterprises across the size spectrum requires that the distinct challenges affecting large versus small producers are understood and properly addressed. However, the IGDP also recognises that many of the challenges facing large and small producers are in fact common ones (especially regarding smallholders and the relatively populous but vulnerable stratum of smaller large-scale commercial farms), which call for common solutions, and sometimes even solutions that involve active partnership or collaboration between small and large enterprises.

Large-scale commercial producers tend to become larger and more capital intensive in part because the real (and relative) returns per hectare tend to decline over time. One way therefore of slowing and possibly reversing this process is to improve the unit returns, for example by means of being more vigilant regarding pest and disease outbreaks, and by lowering input costs through the uptake of conservation agriculture and the resurrection of farmer coops. Promoting a shift towards more intensive land uses is also desirable; expanding the area under irrigation is one possibility, and expanding the use of climate-smart agriculture is another.

Where small-scale producers are concerned, boosting growth is necessary in order to lift many of them out of poverty, which in turn will make small-scale production a more attractive choice among rural dwellers across the age spectrum. The expansion of small-scale production in agriculture, forestry and fisheries is essential to creating a dynamic rural economy in former homeland areas. Given appropriate infrastructure and marketing support, primary production can provide a meaningful livelihood to many more people than it presently does, while under-pinning household-level and local food security through more robust local food networks.

Agro-processing has been highlighted as a key job driver. However, the analysis above also shows that employment trends in agro-processing are not always positive, and that much depends on the type and seemingly the scale of agro-processing facilities. It is also the case that the recent trajectory of the agro-processing sector has tended to work to the disadvantage of primary producers, both small and large, implying that to the extent we seek to mobilise additional investment in agro-processing, its location and nature need to be carefully considered.

To create better market access for South Africa's agriculture, forestry and fisheries products, there is a need for better coordinated efforts to identify and secure export opportunities, for example through negotiating improved market access, and international marketing and trade support. Trade development at the beginning of the value chain will enable a wider participation in the world markets, and growing the exporter base will unlock potential production through

trade. This will result in diversification of the economy and contribute to growth, job creation, equity and a stronger trade balance.

For forestry, boosting production is critical especially if South Africa is not to become dependent on timber imports. Here however there is a strong rationale for the state to directly underwrite the necessary investment in primary forestry production. For fisheries, the inherent limitations of wild capture fisheries are duly noted, while ambitious plans are being developed to dramatically expand both large-scale and small-scale aquaculture.

Critical in supporting priority or strategic value chains is the support of research and innovation. R&D will look at issues of increasing productivity and finding new and innovative ways in which the prioritised value chains can contribute to the fight against joblessness. Research and innovation will be undertaken in collaboration with key agencies and departments such as ARC, the Department of Science and Technology (DST), the Department of Water Affairs (DWA) and the Department of Environmental Affairs (DEA).

Equity and transformation

The liberalisation of agricultural and food markets was premised on the expectation that deregulated market outcomes would be more efficient and would increase access to all market participants, benefitting producers and consumers alike. However, although some efficiencies have arisen, so have unanticipated problems, such as the proliferation of onerous private regulations, and high levels of concentration in some agro-processing subsectors. The high level of concentration among input suppliers raises concerns about South Africa's food sovereignty.

The major agro-processing firms are largely those that dominated at the time of liberalisation, although some are privatised former cooperatives that have thrived particularly since liberalisation. At the same time, liberalisation has meant much greater volatility in the prices of agricultural products. The resulting increase in the risk of farming has prevented new entrants from being effective competitors, or has deterred them from entering in the first place. Similarly, the integration of South African fisheries into the global economy has operated as a powerful constraint on post-apartheid fisheries reform.

It is apparent that South Africa's trade and market policies have largely benefitted the larger stratum of commercial producers, while rendering the smaller stratum of large-scale producers more vulnerable, and stifling the development of small-scale producers. Therefore trade policy on its own is an unreliable instrument for generating shared economic growth and the efficiency consequences of trade reform must be considered in conjunction with the often negative distributional effects.

Infrastructure development such as rail transport, roads and ports, and affordable energy as well as research facilities, science parks and industrial incubator facilities, are key to stimulating more investment in the three sectors, but also to redressing the past under-investment in infrastructure in former homeland areas.

Environmental sustainability

Given the finite availability of water and suitable land, agriculture and forestry are under increasing pressure to increase output per unit of land. For forestry, there is the additional pressure on woodlands and indigenous forests to provide communities with a safety-net in terms of food, fuel, shelter, medicine, etc. In terms of fisheries, the size of the sector is limited by the natural productive capacity of the living marine resources, making it necessary to limit and control the harvesting pressure according to what the resources can sustain on a long-term basis. In addition, agriculture, forestry and fisheries are each subject to climate change, in response to which robust strategies must be found and implemented.

Governance

Weak governance and governance structures have resulted in poor, fragmented implementation of existing strategies and policies, often diluting and undermining the intended impact. The challenges faced in terms of governance can be summarised as a lack of: effective planning, monitoring and evaluation, effective implementation management, and human resource management. While these functions need to be improved across the board, APAP presents the ideal opportunity to refine them in pursuit of discrete, tangible objectives, which will hopefully thereafter have broader benefits for DAFF and its delivery partners, not least the Provincial Departments of Agriculture.

5. SECTORAL INTERVENTIONS

For APAP to effectively speak to Outcomes 4, 7 and 10, and to the objectives set out in the NGP, NDP and IPAP, it needs to unlock the productive potential of agriculture, forestry and fisheries by considering the nature of their binding constraints, whether these be at the level of primary production, beneficiation, or marketing, or indeed a combination of these. However, different subsectors within agriculture, forestry and fisheries operate according to different dynamics and face distinct challenges, thus there is a need to be selective as to which subsectors or value chains to focus upon in the short and medium term, while also recognising that agricultural commodities in particular are often inter-related, in which case it is more helpful to speak of 'integrated value chains'. Using the following general selection criteria, this first APAP focuses on a discrete number of value chains identified as strategic in meeting the objectives of the NGP, NDP and IPAP:

- Contribution to food security
- Job Creation
- Value of production
- Growth potential
- Potential contribution to trade balance (including via export expansion and import substitution).

Eleven sector interventions are presented below. As with the transversal interventions presented in the following section, these interventions are also generically referred to as 'Key Actions Programmes'. Each intervention is presented in terms of a 'problem statement', an overview of the 'nature of intervention', and lastly 'key milestones'.

5.1 Poultry/Soybeans/Maize Integrated Value Chain

Problem statement

South Africa's consumption of white meat has increased far more rapidly than that of red meat, and this pattern is expected to continue (see Figure 13). Unfortunately, much of this increase has been by way of imports, especially of low-cost frozen portions. The potential for import substitution is thus vast, especially if the playing field is levelled, and if production costs are reduced. In respect of the playing field, the local poultry industry has long been concerned about unfair trading practices, and in this respect the import tariff on whole birds has increased from the previous 27% to 82% (the maximum bound rate under the WTO rules); carcasses from 27% to 31%; boneless cuts from 5% to 12%; offal from 27% to 30%; and bone-in portions from a specific duty of 220c/kg (roughly 17%) to an ad valorem duty of 37%. While the impact of these new tariffs is difficult to predict accurately, the impact is likely to be significant, especially if combined with other supportive measures.

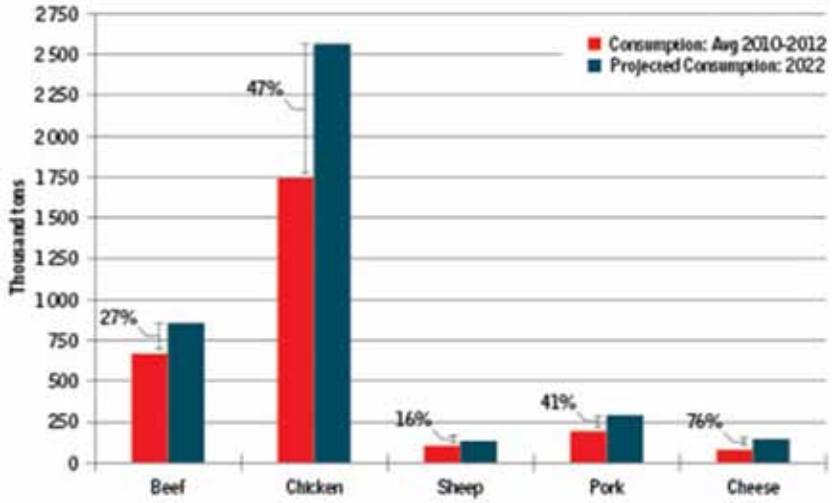


Figure 13: Meat consumption in South Africa
Source: BFAP 2013

As for production costs of broiler and layer production, these depend above all on the prices of animal feed and energy. Between 2007 and 2012, animal feed prices increased by 130%. A key constraint is soya, which is an important ingredient in feed, and much of which South Africa still imports. Despite an increase in domestic soya production of over 300% since 1999, this is far too little to keep up with the rising demand for animal feed; also since 1999, the real value of imported soya oil-cake increased by about 330%, reaching R2,8 billion in 2012. While recent and ongoing investments in soya processing capacity are expected to improve the situation, it is argued that further investment may be required to turn the situation around more comprehensively. Meanwhile, other measures are needed to support domestic production in terms of breeding and pest control. Yellow maize is another important ingredient in animal feed. While South Africa generally provides enough yellow maize for its own needs, in poor production years it is a net importer of significant amounts (e.g. 2006/07 and 2007/08). While 'bad years' cannot be altogether avoided, they can be reduced through the uptake of appropriate technology, such as the development and use of drought resistant varieties and climate-smart agriculture.

As for energy, electricity is essential to ensure ventilation and temperature control for broiler and layer production, however electricity prices have also risen rapidly in recent years, and are expected to continue rising. Urgent attention is therefore required in finding ways of making broiler production more energy-efficient. Internationally this is recognised as an active area of R&D, but has received little attention in South Africa.

Table 2: Poultry/soybeans/maize integrated value chain

Poultry/soybeans/maize integrated value chain: The broiler industry is South Africa's largest agricultural subsector in terms of value of production. The industry is also a complex integrated industry with different commodities (soya beans and yellow maize) feeding into it. The industry is seen as a medium performer in terms of labour absorption. Although the industry grew above inflation for the past decade, for the past several years it has been in distress due to high feed costs and competition from inexpensive imports.

Product	Labour indicator	Real average growth (10 years)	Market share	Volatility index	Trade balance	Import substitution
Broilers	Medium Performer	Medium growth industry	Top 15	Low volatility	Net importer	Yes
Soybeans	Medium Performer	High growth industry	Middle 15	Moderate volatility	Net importer	Yes
Yellow maize	Medium Performer	Low growth industry	Top 15	Moderate volatility	Net exporter	NA

Main challenges and constraints:

- The increasing cost of production, especially feed and energy
- The increasing cost of day old chicks, and variable quality of day old chick supply in the market
- Oversupply of imports from the EU & South America
- Variable control of poultry diseases
- Underdevelopment of consumption in neighbouring countries
- High initial investment for start-up
- Need for R&D to improve production systems and feed conversion ratio
- Undependable electricity supply
- Monopolistic behaviour of processors and retailers
- Lack of official information in the market, stock population, etc.
- Inadequate market access for small-scale producers

Nature of intervention

The most important intervention is to support the domestic soybean industry to further grow, which will ultimately have the effect of making animal feed less expensive (e.g. by relying less on imported oil-cake), and thus render domestic poultry producers more competitive. This can be done by intervening in the soybean and yellow maize sectors at a variety of different points, including incentivising R&D in new seed varieties, introducing control measures to address sclerotinia (a fungal pathogen affecting soybean, sunflower, etc.), the promotion of smallholder soybean and yellow maize production through more targeted technical and input assistance, and encouraging stronger linkages between farmers and feed companies via efficient market intermediaries such as co-ops.

Key milestones

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q2	2014/15	Develop a R&D programme on energy efficiency in poultry production	ARC	DAFF
Q2	2014/15	Develop and implement a national management plan for sclerotinia	CD Plant Production and Health	ARC
Q3	2014/15	Refine and expand smallholder training programmes on primary production and post-harvest practices for soybean and yellow maize	CD Sector Capacity Dev, CD Extension Support	PDAs, ARC, Grain SA
Q4	2014/15	Amend soybean grading regulations to align with industry requirements	CD Inspections and Quarantine Services	Grain SA
Q4	2014/15	Implement, manage and monitor the Compulsory Community Vet Services programme to assist with the deployment of veterinarians in areas that are least serviced by the current pool of veterinarians	CD Animal Production and Health	PDAs
Q4	2014/15	Develop integrated national surveillance and monitoring programmes for poultry diseases of importance (e.g. Avian Influenza and Newcastle Disease)	CD Animal Production and Health	PDAs, SAPA
Q4	2014/15	Implement the independent meat inspection scheme	CD Animal Production and Health	PDAs, SAPA
Q1	2015/16	Develop and deliver standardised and targeted input supply package for smallholder soybean and maize producers by means of reprioritisation of the Ilima/Letsema programme	CD Plant Production and Health	PDAs, ARC
Q1	2015/16	Develop and implement a national poultry support programme inclusive of: • communication system to support extension staff with technical and advisory support services for plant production • training programmes in production systems and farm management	CD Plant Production and Health	SAPA, PDAs, ARC, Grain SA
Q2	2015/16	Training of extension officers and state veterinarians and para-veterinarians on poultry production to support small-holder farmers.	CD Animal Production & Health	PDAs, SAPA
Q4	2015/16	Partner with private sector seed companies in order to develop higher yielding soybean varieties	CD Plant Production and Health	ARC, universities, Protein Research Trust, private seed companies
Q4	2015/16	Develop and implement regulations on retention of protected soybean seeds	CD Plant Production and Health	Grain SA
Q4	2015/16	Develop and facilitate the implementation of support programmes to link commodity-based cooperatives with mainstream markets and downstream agro-processing enterprises	CD Agro-processing and Marketing	dti, SAPA, PDAs, Grain SA
Q4	2015/16	Develop integrated national surveillance and monitoring programmes for residues and food-borne diseases	CD Animal Production and Health	PDAs, SAPA

** Here and elsewhere, 'CD' refers to a chief directorate within DAFF, 'PDAs' refers collectively to the provincial departments of agriculture, 'ARC' stands for the Agricultural Research Council, and 'NT' refers to the National Treasury*

5.2 Red Meat Value Chain

Problem statement

Global red meat consumption has trebled over the past four decades, and increased by 20% in just the last 10 years. Similarly in South Africa, red meat consumption has increased by about 20% since the early 1990s, and is projected to increase by a further 27% by 2022 (see Figure 13 above). Over the past 10 years, South Africa has consistently imported about 10% of its consumption needs. However, there is reason to suppose that South Africa could rely less on imported frozen meat, if it could improve market linkages with the vast herd in the former homelands, which comprise about 40% of South Africa's national herd but little of which enters into formal market networks. It is further estimated that a 50% improvement in veld and herd management in the communal sector could double the current production of livestock and hence of livestock products. Production support directed to this activity will therefore contribute towards economic improvement of the people and the sector. To the extent South Africa also exports certain meats, it is critical that it regains its status with the OIE as a Foot and Mouth Disease free zone, and maintains that status diligently.

Table 3: Red meat integrated value chain

Red meat integrated value chain: The red meat industry is a complex integrated value chain with different commodities (especially yellow maize) feeding into the different red meat sectors, namely beef, sheep and goat meat, and pork. The red meat industry is seen as a medium performer in terms of labour absorption. The industry grew above inflation for the past 10 years and is one of the top 15 contributors towards agricultural GDP. The industry is protected by tariffs on frozen meat imports. The small livestock industry competes mainly against imports neighbouring countries, however the wool industry consistently earns foreign exchange. The industry experiences difficulties due to predators and stock theft, sometimes quite severe.

Product	Labour indicator	Real average growth (10 years)	Market share	Volatility index	Trade balance	Import substitution
Sheep & goats	Medium Performer	Medium growth industry	Top 15	Low volatility	Net importer	Yes
Wool	Medium Performer	Medium growth industry	Middle 15	Moderate volatility	Net exporter	NA
Cattle industry	Medium Performer	Medium growth industry	Top 15	Medium volatility	Net importer	NA
Pig industry	Medium Performer	Medium growth industry	Top 15	Medium volatility	Net importer	Yes
Soya beans	Medium Performer	High growth industry	Middle 15	Moderate volatility	Net importer	Yes
Yellow maize	Medium Performer	Medium growth industry	Top 15	Moderate volatility	Net exporter	NA

Main challenges and constraints:

- Rising production/input costs across the value chain, mainly feed grain prices, administered prices and transport costs
- Inadequate bio-security controls of zoonotic diseases and foot-and-mouth disease (FMD), including poor maintenance of border fencing and erosion diseases i.e. CA and TB
- Unilateral decisions by neighbouring countries on import and export policies can have disruptive impacts on the South African producers
- Inadequate border controls between SA and neighbouring countries resulting in illegal cross-border movement of livestock and contributing towards stock theft and overgrazing
- Widespread stock theft
- Overgrazing
- Weak and unavailable extension and training services to the red meat value chain
- Lack of infrastructure and extension services to small-scale producers in former homelands
- Lack of new market development for small-scale producers in former homelands
- Lack of market information relating to the size of the national herd
- DAFF R&D plan and industry R&D plan are far removed from one another
- Lack of R&D overall and lack of sustainable resource management (veld, forage, pasture, water, livestock genetics and environmental protection)
- Failure to manage natural disasters such as veld fires and predators
- Lack of compliance and enforcement of existing legislation
- Poorly consulted legislation and/or amendments is detrimental to the industry, e.g.
    - Proposed Fertilizer and Feeds Bill (DAFF)
    - Proposed ban on the export of SA hides (dti)
- Traditional slaughtering and capturing the hides and skins (goat skins) lost due to the lack of transport of small quantities in rural homeland areas.
- The increasing cost of production.

Nature of intervention

Interventions will focus commercialising the communal livestock systems by means of improving the herd health status and husbandry, continual reduction and prevention of foodborne illness, improving record management systems, and encouraging the use of technologies to improve production. New national programmes will be introduced to improve livestock species and breeds by way of accurate and individual animal identification, animal movement control and proper record-keeping. In addition to the above, stronger systems will be put into place in order to target important zoonotic diseases which impact on human life and the economy.

Key milestones

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q4	2014/15	Determination of the livestock census for the categorisation of South African livestock production systems	CD Animal Production and Health	Stats SA
Q4	2014/15	Retrain extension officers according to industry requirements and capacitate extension services to support and educate to improve animal husbandry and productivity of the national herd (e.g. better quality meat and hides meat)	CD Animal Production and Health	ARC, PDAs
Q4	2014/15	Animal Recording and Improvement Schemes Programme, to develop, maintain and improve productivity of a healthy national herd	CD Animal Production and Health	ARC, PDAs
Q4	2014/15	Institute and coordinate Compulsory Community Service for Vet graduates; activate mobile veterinary clinics for remote areas in conjunction with community services for vets to provide basic animal healthcare services; allocate groups of graduates to State and Private Vets to be mentored to address nationally prioritized projects	CD Animal Production and Health	PDAs
Q4	2014/15	Establishment of a National Livestock Identification and Traceability System	CD Animal Production and Health	PDAs
Q4	2014/15	Implement an Independent Meat Inspection Programme	CD Animal Production and Health	PDAs
Q4	2014/15	Develop the Animal Disease Management Plan	CD Animal Production and Health	PDAs
Q4	2014/15	Improved HR capacity for veterinary services, both national and provincial	CD Animal Production and Health	PDAs
Q4	2015/16	Improvement of laboratory (diagnostic) services	CD Animal Production and Health	ARC, PDAs
Q4	2016/17	Enhance LandCare and Rangeland (Veld) Monitoring and Improvement Programme: • Develop control programme of declared weeds and alien species in terms of Conservation of Agriculture Act, 43 of 1983, prioritising those harming agricultural resources • Veld restoration and reinforcement incentive through indigenous rangelands rehabilitation (afforestation) • Farm and veld planning provision and management systems for smallholders' land • Emergency relief scheme for natural disaster (drought, floods, etc) • Compile state of veld degradation on smallholder and commercial land	CD Natural Res Mgt and CD Animal Production and Health	PDAs

5.3 Dairy

Problem statement

South Africa's cost per litre of milk is globally the fourth lowest, with only New Zealand, Australia and Bulgaria succeeding in producing at lower costs. Despite this efficiency in production globally and the volatility in raw milk prices, constant growth in demand for dairy products has allowed the industry to expand on a continuous basis in terms of volume of milk produced. Between 2001 and 2012, the volume of milk produced in South Africa increased by approximately 34%.

A key development in the dairy value chain during the past two decades has been the decreasing number of farmers. Between 1998 and 2012, the number of producers shrunk from 5 600 to 2 200 in 2012, a decline of about 60%. The fall in producer numbers and an increase in output levels mean that the remaining producers tend to be very large-scale. This has been accompanied by a significant reduction in employment levels within the dairy industry, from approximately 60 000 in 1998 down to 20 000 employees in 2012. The processing and distribution segment of the chain is characterised by high levels of concentration, with 71% and 81% of total income generated by the top 5 and 10 companies, respectively. This presents a major constraint for inclusive growth: uncompetitive behaviour such as collusion within the sector has specifically led to the exclusion of smallholders and SMMEs across the value chain.

Furthermore, owing to the cyclical nature of milk production, with the majority of milk produced in the summer season, volatility in milk prices exposes both the processors and farmers to risk. Due to their limited scale, it is costly for small producers to bear this volatility and they end up leaving the industry. The risk that farmers leave the industry in turn creates risks for processors, as they also lose access to the necessary milk input. In particular, processors risk losing their milk supply for extended periods because it is easier for farmers to exit from dairy production than it is to re-enter.

Nature of intervention

The interventions in respect of the dairy industry must be aimed at addressing the structural imbalances that continue to characterize the industry. These imbalances stem from the fact that there is a relatively small number of large-scale processors, relative to a large number of producers who do not have sufficient bargaining power (when negotiating prices) relative to processors. The interventions will focus on the promotion of marketing cooperatives among milk producers as well as the encouragement of large-scale processors to support smallholder dairy producers in the form of supply of inputs and the promotion of long-term contracts in order to enhance the financial viability of smallholder dairy producers. Measures will also be put in place to support and fund research and technology development that is aimed to improving milk quality, dairy herds quality and the efficient production and marketing practices of milk especially among smallholder producers in order to enhance their access to markets.

Table 4: Dairy/maize integrated value chain

Dairy/maize integrated value chain: The dairy industry is a sensitive industry, competing against imports from subsidised countries like those in the EU. The value chain of the industry is extremely complex. The chain is integrated with the feed and maize industries. The industry is seen as a medium performer in terms of labour absorption. The industry grew above inflation for the past decade. The industry can experience difficulties due to high feed costs and imports of processed products.

Product	Labour indicator	Real average growth (10 years)	Market share	Volatility index	Trade balance	Import substitution
Dairy	Medium Performer	Low growth industry	Top 15	Medium volatility	Net importer	Yes
Yellow maize	Medium Performer	Medium growth industry	Top 15	Moderate volatility	Net exporter	NA

Main challenges and constraints:

- The increasing cost of production, especially feed and energy
- Oversupply of imports from the EU
- High initial investment for start-up
- Need for R&D to understand the chain
- Dependable electricity supply
- Monopolistic behaviour of processors and retailers
- Lack of official information in the market, stock population etc.
- Inadequate market access for small-scale producers
- Concentration in the chain

Key milestones

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q3	2015/16	Partner with the dti and smallholder dairy producers to promote the establishment of marketing and primary cooperatives among producers in order to reduce unit marketing costs and enhance their bargaining power relative to processors	CD Cooperatives and Rural Enterprise Development	PDAs, dti, dairy processors
Q4	2015/16	Partner with large-scale dairy processors and smallholder producers to create dairy inputs supply schemes with a focus on smallholder producers	CD Food Security	ARC
Q4	2015/16	Partner with large-scale dairy processors and smallholder producers to promote the use of long-term procurement contracts between processors and producers.	CD Food Security	PDAs, processors
Q4	2015/16	Support and fund research and technology development aimed at improving milk quality, dairy herd quality and the efficient production and marketing practices of milk especially among smallholder	ARC	CD Co-operatives and Enterprise Development

5.4 Sugar Cane

Problem statement

Sugar production in South Africa has dropped by just less than 20% over the last 10 years, resulting in a loss of more than 8 000 direct jobs throughout the industry and the closure of one sugar mill.

A continued drop in sugarcane production will render more sugar milling facilities economically unviable, resulting in more mill closures and more direct job losses in the industry. The decline in the industry is a result of climate variability, high input costs and the slow land restitution process in South Africa. With 38% of commercial agricultural land is still subject to gazetted land claims, the lack of the speedy settlement of these claims have resulted in limited investment on affected farms.

In terms of small-scale growers (farmers) there has been a notable decline in the number of growers and the area under cane. High input costs, lack of access to finance, reliance on contractors and the need for production infrastructure (irrigation, fencing, and internal roads) continues to hinder growth amongst these growers.

The sugar sector is also currently experiencing a number of challenges at an industrial level. These relate to the increasing level of imports which threaten the sustainability of all farmers including the 343 commercial land reform farmers and 25 200 small-scale growers, the lack of access to preferential markets for South African sugar, and the lack of mandates for access to the fuel and electricity markets. These industrial related challenges will however be addressed through the IPAP.

Nature of intervention

As stated above, the area under sugar cane production has been in decline for over a decade. The industry is proposing several interventions relating to land reform and small-scale grower support in order to reverse these trends, for instance to position land reform and small-scale growers to realise the benefits associated with the nascent biofuels market.

Table 5: Sugar cane value chain

Sugar value chain: The South African sugar cane production generates over R5 billion in gross value, and contributes between 0,5% and 0,7% of national GDP. About 60% of this sugar is marketed in the Southern African Customs Union (SACU) with the remainder exported to markets including those in Africa, Asia, the Middle East and USA.

Product	Labour indicator	Real average growth (10 years)	Market share	Volatility index	Trade balance	Import substitution
Sugar	High performer	Medium Growth Industry	Top 15	Medium Volatility	Net exporter	Yes

Notes: Growth of the industry has been hindered by the high import volumes experienced during the recent season. Growth over the past ten seasons has been below CPI averaging 3%. This is growth measured in terms of sales into the SACU market.

Main challenges and constraints:

Small-scale growers

- Lack of access to production and infrastructure funding for small-scale growers on communal land
- Over reliance on external contractors for planting, ratoon management, harvesting and haulage
- Current scale grower models impact negatively on profitability
- Need for continuous training and capacity building of small-scale growers
- Need for specialist extension and mentorship support
- A lack of governance and business management support to the approximate 103 primary co-operatives in the industry
- Inadequate infrastructure to support production – internal roads, fencing, irrigation equipment
- No maintenance plan for communal irrigation schemes

Land reform

- Slow pace of settlement of gazetted land claims – 38% of gazetted claims remain unresolved
- Need to define an industry specific business process and more appropriate models to support communities acquiring commercial farms under the land restitution programme

Key milestones

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q1	2014/15	Introduce a small-scale grower programme to compliment MAFISA loan facility (seed cane, fertiliser and infrastructure)	KZN PDA	Mpumalanga PDA, ADA
Q1	2014/15	Enhance the existing extension partnership delivery through exposure to multi-stakeholder processes programme with provincial departments	KZN PDA	
Q3	2014/15	Develop a decision support tool for the proposed sugar industry settlement models to enable communities to better understand the economics of sugarcane farming	KZN PDA	DAFF
Q4	2014/15	Develop a customised provincial mentorship partnership programme for land reform growers	KZN PDA	
Q3	2015/16	Develop new production models to enhance small-scale grower sustainability	KZN PDA	Mpumalanga PDA, ADA
Q1	2015/16	Introduce a programme to support communal irrigation infrastructure development in Mpumalanga Province	Mpumalanga PDA	
Q1	2015/16	Develop a comprehensive co-operative support programme for small-scale growers	KZN PDA	DRDLR, dti
Q2	2015/16	Develop an industry-specific business process and new settlement models for restitution claims in the sugar industry	DRDLR	

5.5 Wheat Value Chain

Problem statement

In the mid-1970s, South Africa produced about 20% more wheat than its consumption needs, but domestic consumption has since doubled while production has remained static, such that presently about 50% of what is consumed domestically is imported. Interestingly, the area planted has declined by about 60% to 70%, much of it being put into extensive grazing, improved pastures, or canola, while the productivity of the remaining hectares under wheat has risen, which is why overall production levels have remained fairly stable. The consensus is that there is no particular reason why South Africa must regain self-sufficiency in wheat, and yet the present levels of import dependence are excessive and must be corrected – they contribute to higher bread prices than would otherwise be the case. Moreover, at least some of the land that has been withdrawn from wheat production could in principle be returned to it, especially in the dry land production areas of the Free State and Western Cape.

The reasons for the stagnation in domestic wheat production are numerous, however the main contributing factor is declining average gross income per hectare (except for a slight peak in 2011), resulting in total wheat plantings declining to about 100 000 hectares. Another factor is the lack of adequate R&D into new cultivars. The reason for the lack of investment has to do with capacity, coupled with a lack of investment by private seed companies in wheat. One of the main aims of a stronger breeding program for wheat would be to develop cultivars with a higher yield, and another aim would be to develop varieties that perform well as part of a conservation agriculture package, which elsewhere has proven able to reduce production costs and reduce sensitivity to low rainfall, both of which are essential if the area under wheat is to expand sustainably.

The Western Cape production area plays a very important role in the supply of wheat in South Africa, accounting for about 40% of total domestic production, which is excess of the demand in Western Cape itself. However, because of inadequate local milling capacity, this local surplus is expensive to transport to Gauteng and beyond, effectively lowering the returns to Western Cape wheat farmers. This situation has been exacerbated by escalating production costs. Reducing bulk transport costs by progressively increasing use of rail is also essential, and can be achieved through integrated planning with transport infrastructure development plans of DoT.

Table 6: Wheat value chain

Wheat value chain: Wheat has a low labour multiplier, and production costs are presently high. The main rationale for seeking to revive the wheat sector is to ensure less dependence on imports, which contributes to volatility in consumer prices and has hurt traditional wheat growing areas.

Product	Labour indicator	Real average growth (10 years)	Market share	Volatility index	Trade balance	Import substitution
Wheat	Low Performer	Low Growth Industry	Top 15	High volatility	Net importer	Yes

Main challenges and constraints:

- High cost of production
- Low-cost imports, including from countries with high subsidy levels
- High variability of yields, increasing risk of climate stress
- Inadequate investment in new cultivars and uptake/adaptation of conservation agriculture

Nature of intervention

The interventions in respect of wheat must seek to make South African wheat farmers more competitive so that at least some of the hectarage taken out of wheat is restored to it. This will be done through a combination of R&D in new cultivars, adaptation of conservation agriculture technologies to wheat production, while examining the possibility of augmenting milling capacity in the Western Cape near to one of South Africa's main production areas. Specific interventions will be introduced to broaden involvement of smallholders in wheat production.

Key milestones

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q3	2014/15	Develop a training and communication system to support extension staff with technical and advisory support services for plant production	CD Sector Capacity Dev	PDAs, ARC, Grain SA
Q4	2014/15	Partner with private sector seed companies in order to develop higher yielding varieties	CD Plant Production and Health	ARC, universities, Winter Cereal Trust, private seed companies
Q4	2014/15	Refine and expand smallholder training programmes on primary production and post-harvest practices for wheat	CD Sector Capacity Dev, CD Extension Support)	PDAs, ARC, Grain SA
Q4	2014/15	Develop and deliver standardised and targeted input supply packages for smallholder wheat producers by means of reprioritising the Ilima/Letsema programme	CD Plant Production and Health	PDAs, ARC

5.6 Horticulture

Problem statement

Horticulture production is critical for employment and income generation in South Africa, especially in rural areas but also in peri-urban zones. Increased investments into horticultural production can help reduce rural unemployment and contribute to GDP growth and exports, but integrating smallholder farmers who can benefit from export opportunities remains a challenge. In 2012, hhorticultural products contributed 25% to the total gross value of agricultural production, with strong export performance by citrus (R7,9 billion), wine (R6,9 billion), apples, pears and quinces (R5,2 billion) and grapes (R4,6 billion) (DAFF, 2013). Most of these exports are from large-scale commercial producers.

According to Kirsten, Stander, & Haankuku (2010), primary production in South Africa's horticultural sector, as a share of total agricultural output, has increased from about 18% in 1980 to 26% in 2007. The most pressing challenge in the horticultural sector is the rise in domestic supermarkets, which have strict private standards covering the size, shape and colour of fresh produce, including strict standards covering minimum Residue Levels (Barrientos & Visser, 2013). The challenge with these quality control systems is that they tend to favour commercial producers to the exclusion of smallholder producers, further contributing to market dominance.

The largest South African supermarkets are also leading the expansion of modern retail across Sub-Saharan Africa. The biggest South African supermarkets (and their respective market share as percent of sales in 2010) are Shoprite (21%), Pick and Pay (18%) and Spar (12%) (Barrientos & Visser, 2013).

Fresh fruit in particular is a prominent export sector, whilst vegetable production is largely for the domestic market. Currently, over 50% of fruit produced is exported, and less than 20 percent goes directly into the domestic fresh produce markets. In terms of the distribution of vegetables, 46% of production is sold through the fresh produce markets, 42% through direct sales and own consumption, 10% are processed, and 2% of vegetables are exported. Another constraint is the absence of a national producers' organisation.

The major constraints in the domestic fresh produce markets are deteriorating physical infrastructure (aggravated by a lack of re-investment by municipalities), non-compliance to food safety and health standards, and poor management capacity of fresh produce markets. These markets are furthermore poorly transformed in terms of access by smallholder producers and participation of PDIs on the market floors. Currently an increasing demand exists for vegetables in SADC countries.

The wine industry in South African is an important export industry and wine exports in particular have skyrocketed since the deregulation of South African markets. SAWIS (2013) reports that the total hectares under wine vineyards increased by 4% between 2002 and 2012, while the total number of litres produced increased by 20%. However, the extensive liberalisation of South Africa's wine industry has also exposed the industry to the current global economic downturn. The second challenge could further be related to the growing importance of supermarkets as wine retailers, which has changed the way in which wine is consumed and marketed, turning the industry from premium bottled wine to bulk retail quality wines.

Table 7: Horticultural value chain

Horticulture value chain: The South African horticulture industry can add value through commitment to exporting and reliable supply of consistent quality products. A supporting environment needs to be established, with the aim to assist exporters in the export of high quality and innovative products to opportunity markets. A high degree of co-ordination is needed to ensure that pack houses adhere to set standards and requirements. South African producers should develop a competitive advantage by focusing on non-cost factors (e.g. quality) and compete in terms of innovative value chain aspects (i.e. products, production, packaging, logistics, marketing, sales and markets).

Product	Labour indicator	Real average growth (10 years)	Market share	Volatility index	Trade balance	Import substitution
Vegetables	High Performer	Medium growth industry	Top 15	Low volatility	Net exporter	NA
Citrus	High Performer	Medium growth industry	Top 15	Moderate volatility	Net exporter	NA
Deciduous	High Performer	Low growth industry	Middle 14	Moderate volatility	Net exporter	NA
Subtropical	High Performer	Medium growth industry	Top 15	Moderate volatility	Net exporter	NA
Viticulture	High Performer	Medium growth industry	Top 15	Moderate volatility	Net exporter	NA
Floriculture	Low Performer	Medium growth industry	Bottom 14	Moderate volatility	Net importer	YES

Main challenges and constraints:

- Relatively high and rising cost of production, changes in energy and fuel prices
- Theft of expensive irrigation equipment
- High transport costs between markets
- Delays due to degradation of supporting infrastructure within supply chains, e.g. handling facilities at ports, roads, energy supply
- The non-availability of new cultivars through R&D
- Poor skills and knowledge levels of new entrants
- The variable quality of imported seed and the risk of importing diseases
- The declining market share of South Africa's fresh produce markets
- Impact of climate changes on the horticulture sector
- Changes in distribution of pests and diseases
- Compliance with importing countries' sanitary and phytosanitary regulations

Nature of intervention

The most important intervention is to support the development of the horticulture industry through a dedicated institutional development programme. The important elements of this programme are the formation of the industry-wide body, the promotion of co-operatives and facilitation of formation of farmer associations as well as study groups in the production areas.

Knowledge is a strategic element in enhancing global competitiveness. The South African horticulture industry needs to be knowledge-based in order to retain the market share both locally and internationally. Training forms the basis for human resource development to address skill shortages and to enhance competitiveness. Enhanced training of farmers and farm workers is of critical importance for improved production, and increased global competitiveness of the horticulture sector.

Government has also identified infrastructure development as an important factor in moving the South African economy to a higher growth path, and this is critical to the horticulture industry as well.

Finally, the growth of the horticulture industry depends on the development of new technologies. The technologies range from breeding of new varieties/cultivars, to control of pests and diseases, to water conservation technologies, amongst others. Research is a critical element in the development of new technologies. Thus the development of new technologies requires a well-functioning research system.

Key milestones

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q1	2014/15	Production inputs supplies provided through existing grant funds such as Ilima/Letsema i.e. seeds, seedlings and fertilisers etc.	CD Plant Production and Health	PDAs, ARC
Q1	2014/15	Establish an industry-wide body for representing the horticulture industry in communication with government	CD Stakeholder Relations & Communications	CGA, Hortgro, SATI, Subtrop, Safga, PDAs
Q2	2014/15	Establish a training programme geared at subsistence and smallholder farmers to be implemented via extension services	CD Sector Capacity Dev, CD Extension Support	PDAs, ARC
Q3	2014/15	Develop a comprehensive research programme for horticultural sector, e.g. breeding programme, pest and disease programme	CD Plant Production and Health	ARC, universities, DST

5.7 Biofuels Value Chain

Problem statement

Biofuels possibly represent the best all-around opportunity to grow South Africa's field-crop subsectors without creating a price-depressing over-supply. While the consequences for food security must be monitored, there are large amounts of under-utilised arable land in former homelands that can be brought into production, as well as some land in commercial areas, including under-utilised marginal land suitable for e.g. sorghum, especially if using conservation agriculture. The role of APAP in respect of biofuels will be to ensure that primary production keeps pace with the development of processing capacity and blending requirements in a manner that benefits both small-scale and large-scale farmers, and that complements the biofuels incentive scheme to be administered by the Department of Energy.

Nature of intervention

There are two main types of interventions regarding biofuels. The one type relates to a cluster of R&D initiatives to ensure that farmers have access to the best possible varieties for feedstock production, including R&D that enables them to increasingly take advantage of conservation agriculture methods. The second is to determine how best to develop the smallholder sector to become feedstock suppliers, especially as much of the land that could be made available for biofuels feedstock production is located within the former homelands.

Key milestones

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q2	2014/15	Partner with private sector seed companies in order to develop higher yielding varieties of targeted feedstock crops	CD Plant Production and Health	ARC, DST
Q2	2014/15	Launch intensive research programme to develop conservation agriculture options for key feedstock crops, e.g. grain sorghum	ARC	Grain SA
Q1	2015/16	Liaise with seed companies to ensure adequate availability of seeds for feedstock crops according to anticipated up-scaling	CD Plant Production and Health	Selected seed companies, dti
Q1	2015/16	Develop a smallholder biofuels feedstock support strategy, including: • standardised and targeted input supply package for feedstock crops, drawing on Ilima/Letsema programme • scheme models for introduction in under-utilised former homeland areas	CD Co-operatives and Enterprise Development	PDAs, Grain SA, SASA, dti, DME

5.8 Forestry

Problem statement

The forestry sector is currently experiencing a myriad of challenges which impede it from reaching its production and employment potential. These challenges include low afforestation uptake due to cumbersome licensing processes, under-investment in long rotation uses such as timber for sawlogs, and dominance by a few big, vertically-integrated forestry corporations. Regarding plantations managed directly by DAFF, the Temporary Un-Planted (TUP) area is excessive: 21 000 hectares (33%) of the 61 000 hectares of the total plantation area, versus the industry norm of 3%. This results in an abnormal age-class distribution which makes yield regulation for sustained volumes almost impossible. In addition to the high TUP area, the Category C plantations are generally of such a poor stock, due to repeated coppice regeneration, that most of them should be re-planted with new, superior genetic stock. Because of the vertical integration of the large private companies, combined with the lacklustre performance of the State managed plantations, smaller processors throughout the entire value chain experience problems in securing raw material supplies, and new firms generally do not attempt to enter the sector.

Poor resourcing of state forests has led to non-compliance to the Department's own legislation, such as the NVFFA and NFA, and continues to be an embarrassment for a sector leader. The NVFFA is one example where DAFF in many instances does not belong to Fire Protection Associations. This causes poor cooperation during firefighting with neighbours and other members of such associations, resulting in unnecessary and costly losses.

Other critical challenges relate to economically unsustainable plantation forestry due to high production costs, low productivity, high wages and the seemingly high opportunity costs associated with long-rotation timber. In addition is the poor condition of infrastructure due to insufficient maintenance, especially in Category B and C forests. In this regard some smaller isolated plantations lack basic infrastructure such as buildings, electricity and communication systems. Environmental obligations are not always adhered to, especially in terms of invasion of riparian zones by alien vegetation and FSC certification.

Notwithstanding these challenges, the sector's goals remain. Following two decades of shrinkage of the country's plantation resources and increasing pressure on natural forests and woodlands to ensure renewed growth, the sector seeks to effect transformation and sustainability throughout the value chain, in economic, social and environmental terms and in ways which seek to improve the lives of the poor in general and rural communities in particular.



Table 8: Forestry value chain

Forestry value chain: South Africa has been a net exporter of forestry products from 1996 to 2012. The total value of exported forestry products amounted to R13,8 billion in 2012. The main markets for South African forestry exports in 2012 were Indonesia (20%), China (14%), Zimbabwe (5,9%), Thailand (5,8%) and UK (5,6%). Chemical wood pulp, craft liner and chemical wood pulp soda were the leading export products that constituted 72% of total forestry products. However, as noted above, if current trends continue South Africa is likely to be reliant on imports of sawlogs in the medium-term, which will have negative consequences for domestic sawmills, furniture makers, and home builders (i.e. for roof trusses). It is estimated that by 2030, South Africa will have a 50% shortage of timber.

Product	Labour indicator	Real average growth (10 years)	Market share	Volatility index	Trade balance	Import substitution
Forestry	High Performer	Low growth industry	Middle 15	Low risk	Net importer	Yes

Main challenges and constraints:

- Under-investment, especially in long-rotation forestry for timber
- Onerous nature of the afforestation licensing process
- Need for more skills development, capacity building and funding of forestry projects
- Impact of climate change
- Need to define robust models for support communities acquiring commercial plantations via the land restitution programme
- Limited rail infrastructure in forestry areas
- Low levels of public funding towards research and innovation
- High transport costs
- Need for improved fire management

Nature of intervention

DAFF's commercial plantations are currently not being managed on a sustainable basis due to a lack of funding to replant temporary unplanted areas. The existing 33% unplanted area is unacceptable in any forestry operation.

Planted assets are considered to be capital in nature. When the temporary unplanted area of 33% which is managed by DAFF is carefully considered, it equates to the state not utilising the potential to increase its capital asset base. When it is further considered that the assets did exist previously but deteriorated, inter alia due to being underfunded, it is difficult to explain to the Forest Industry as a whole given that DAFF is meant to be a sector leader and as such should lead by example.

Not only does the need exist to re-plant temporary unplanted areas, DAFF also has to improve the genetic stock planted by investing in the latest genetic material. This means that some of the existing planted stock should be replanted with more sophisticated strains once they are harvested. In the past the gum stumps were left to sprout after harvest in order to reduce costs. It is however now necessary to kill off the old stumps and replace them with superior strains, which is in line with current international best practice.

Considering the re-planting of the temporary unplanted areas and the improvement of growing stock, it is possible to increase the standing value from R374 million by at least 40% (R150 million) to R524 million.

In addition to growing stock, the assets on commercial forestry land include the value of buildings, roads and fences. Due to budget constraints over the last 10 years or so, this infrastructure deteriorated. In Mpumalanga the deterioration was aggravated by a cyclone in February 2012 which caused serious damage to roads and buildings. It stands to reason that building infrastructure belonging to the government should not be allowed to deteriorate to the extent that it becomes unusable.

In the Western Cape there was an action approved by the Cabinet to deforest certain marginal forestry areas. This was done over a number of years. Considering the need for job creation in South Africa and the shortage of saw timber, Cabinet partly reversed the decision and there is now an area of 8 473 hectares that has to be replanted. This area will increase to 22 402 hectares by 2020. This will raise the value of the forestry asset by approximately R163 million, while creating 1100 permanent, decent jobs. There are also the job opportunities emanating from the value that can be added to the raw product and which does not make part of the 1100 jobs mentioned.

Additional funding for capital investment for forestry will be needed and will have to be spread over a number of years. Accordingly there is a need to ensure sustainable management of our forest resources, of which a key part begins with refurbishment. For this to be possible, it is imperative that funds should be made available to improve the capital assets, such as workers' housing, access roads, and sanitation and water infrastructure.

Along with the underutilised state plantations, a significant drive should be aimed at afforesting the land identified in the Easter Cape and KwaZulu-Natal. This area, approximately 100 000 hectares in total, will contribute extensively towards adding to the national timber supply as well as job creation and providing opportunities for transformation and small business development. New afforestation of areas identified in the Industrial Policy Action Plan 2011/2012-2013/2014 could result in the creation of 15 600 jobs.

Different funding models are being explored in discussion with the private sector and other funding agencies. APAP should through its suggested incentive measures put in place a Forestry Development Fund in order to encourage investment by the private sector and other agencies into the sector. The Forestry Development Fund should cater to the funding requirements of the entire value chain, including the forestry processing sector, as this is critical to growth of small-scale forestry processors, especially the saw milling and furniture making industry.



Key milestones

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q2	2014/15	Develop new management model for State owned Forests	CD Forestry Development and Regulations	DST, DPE
Q4	2014/15	Small Growers Support (financial and non-financial) • Develop framework for establishment of Small Growers Fund • Develop guidelines and toolkits to support SMMEs	CD Forestry Development and Regulations	FSA
Q4	2014/15	Facilitate the implementation of the National Forestry Research and Development Strategy • Equitable share of R&D investment by DAFF • Development of new biological controls • Integrated forest protection research	CD Forestry Development and Regulations	DST, FSA
Q4	2014/15	Facilitate the implementation of the National Forest Protection Strategy • Pest & disease diagnostics • Pest & disease monitoring • Awareness programme • Biological control for small growers • Develop funding model for FPA support	CD Forestry Development and Regulations	FSA, WoF
Q4	2015/16	Timber Production: Afforestation – backlog of EIAs • Commission for EIA to address licensing backlog	CD Forestry Development and Regulations	FSA, DWA, dti, DEA
Q4	2015/16	Review conditions around issuing of water licenses (regulatory conditions and compliance costs for small growers)	DWA	CD FDR
Q4	2016/17	Timber Production: Re-commissioning of the Western Cape and Mpumalanga – replanting to commence in all exited areas	CD Forestry Operations, CD Forestry Development and Regulations	DPE / ICFR
Q4	2016/17	Processing: pole treating and sawmilling including pelleting, support small pole treating and sawmilling operations through provision of support from the current DAFF timber through deliberate policies that favour small pole treating operations	CD Forestry Operations, CD Forestry Development and Regulations	dti, FSA, NT
Q4	2018/19	Non Timber Forest Products (NTFP): charcoal production; honey production; and pelleting (forestry) – support to these sectors to be provided through the utilization of start-up funding and linking them to markets	CD Forestry Development and Regulations	dti
Q4	2018/19	Timber Production: Refurbishment of Category B & C plantations	CD Forestry Operations	DPE / ICFR
Q4	2018/19	Plantations identified for FSC Certification certified	CD Forestry Operations	DPE / ICFR

5.9 Small-Scale Fisheries

Problem statement

The development of a new Small-Scale Fisheries Policy comes more than two decades after the promulgation of the Marine Living Resources Act (Act 18 of 1998) ('MLRA') and after long-term commercial rights were granted. In the past, Small-Scale Fishing was not recognised in the MLRA that regulates access to, and the consumptive use of, marine living resources. The allocation of commercial fishing rights negatively impacted on the traditional fishing of communities and their lifestyles, as a large percentage of these fishing communities did not receive any allocations. The Marine Living Resources Amendment Bill will give recognition to and enable the allocation of fishing rights to identified fishing communities who have previously been excluded from the commercial fishing rights allocation process in South Africa, thereby redressing the inequalities wrought by past fisheries systems. The development of the Small-Scale Fisheries Policy has taken place within a very challenging and complex commercial and policy environment attempting to address:

(a) The fact that small-scale fishing is not recognised in the legislation that regulates access to, and the consumptive use of, marine living resources

(b) Unfairness of past decisions to allocate marine living resources in an exclusive way (that is for commercial and recreational purposes only) and without due consideration to the vulnerability that most Small-Scale fishers would face if forced to compete within a commercial environment

(c) The global economic recession

(d) Lack of gender equity

(e) Increasing concern about the state and sustainability of marine living resources

(f) High levels of poverty and food insecurity, not only within the affected coastal communities, but in the Southern African region as a whole, and

(g) Equality Court Orders that compelled the state to finalise a policy framework that will effectively accommodate traditional and subsistence small-scale fishers within the allocation of fishing rights by securing the socio-economic rights of traditional subsistence fishers and ensuring equitable access to marine living resources for these fishers.

Nature of intervention

The Department recognises that the allocation of fishing rights is only part of the process of uplifting marginalised fishing communities. On-going and cross-sectoral support is required to fully achieve this. The Small-Scale Fisheries Policy introduces a dispensation designed to promote the development and upliftment of the small-scale fishing communities by contributing towards eradicating poverty. It also seeks to ensure food security and promote equity without endangering the ecological sustainability of the resources the communities depend on. Local, provincial and national Government must provide support to ensure that the small-scale fisheries sector is able to contribute to poverty alleviation and food security as well as to the growth and development of vibrant local economies based on the principles of social justice, participatory democracy and sustainable marine resource utilization.

The Department is aware that for communities to get the maximum benefit from the marine living resources in their area, these communities must be responsible for adding value to the resource they are harvesting and must benefit directly from doing so. The Department must assist communities with appropriate infrastructure support, advice and other relevant mechanisms in order to achieve this objective. The Small-Scale Fisheries Policy proposes mechanisms that will assist communities with the processing and marketing of marine living resources. These mechanisms include, but are not limited to, the following:

(a) Subsidy schemes for the storage of fish, which could be in the form of financial support for storage facilities and ice machines

(b) Skills training of people from fishing communities, fishers or non-fishers, in the areas of processing, storing, packaging, marketing, transporting and exporting of fish, and basic business skills such as financial management, human resource management, logistics and business management

(c) Subsidy schemes for the establishment of locally based and owned marketing companies, especially companies focusing on high quality marine living resources caught by small-scale fishers using environmentally friendly catching methods

(d) The development of a South African label/certificate for fish products caught by small-scale fishers in an environmentally friendly manner with traditional fishing methods and with insignificant levels of by-catch; this certificate should also guarantee that the marketing companies adhere to high levels of social and ethical responsibilities, and

(e) Establish small-scale fisheries development nodes which, inter alia, will focus on value addition, and which could be jointly managed by public sector bodies or co-operatives.

Key milestones

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q1	2014/15	DAFF to finalise allocation of small-scale fishing rights to fishing cooperatives	DAFF: Branch Fisheries Management	District Municipalities
Q4	2014/15	DAFF to identify fisheries development zones and engage District Municipalities for the development of these, incorporating plans into IDPs, e.g. proposed cold storage and fish processing facilities in Port Nolloth harbour, Western Cape harbour, and identified key areas in the Eastern Cape and KZN will undergo EIAs: • DAFF to put aside at least R50m for setting up cold storage and fish processing facilities (including provision & maintenance of transport, waste management & cold chain storage facilities) • Develop relevant marketing strategies for identified fisheries zones	CD Marine Resource Management, Directorate Socio-Economic Development	District municipalities

5.10 Aquaculture Competitiveness Improvement Programme (ACIP)

Problem statement

Globally aquaculture is expanding rapidly at an average of 9% annual growth rate. The contribution of aquaculture to total fisheries consumption has grown from 9% in 1980 to 47% in recent years (FAO, 2012). However, South Africa's contribution towards global aquaculture production remains very low at one per cent. The South African aquaculture sector which is still in its infancy is expected to grow in the future. In general the following are critical constraints that need to be overcome to enable growth of the sector:

- Access to suitable sites both on land and sea
- Lack of available sheltered areas
- Competition with other water or land users
- Lack of access to development finance for new entrants
- Lack of skilled personnel and aquaculturists in the sector
- Lack of marketing in the sector that can promote the products within the local and international markets, and
- The cost and time burdens associated with Environmental Impact Assessments (EIAs).

The South African government has prioritised the aquaculture sector and realised its potential to contribute towards food security, job creation, economic development, rural development, reduction of imports and transformation. DAFF, together with its partners in government and private sector, have developed a National Aquaculture Strategic Framework and its Action Plan that guides the development of an equitable, diverse, viable, competitive and sustainable aquaculture sector for South Africa. Cabinet approved the National Aquaculture Policy Framework (NAPF) for implementation, and the proposed programme intends to implement one of the major proposed policy interventions. Major interventions identified include an integrated approach to promoting investment in production and support infrastructure, funding for research and development, establishment of industry/farmer support and management programmes, and most importantly personnel and capacity building. The plan is summarised into ten high-level interventions as specified below.

The Ten Point Plan will:

1. Create an enabling, integrated regulatory and operational environment for developing an equitable and globally competitive aquaculture sector for South Africa.
2. Increase access to available public and private land and water bodies for utilisation for aquaculture purposes.
3. Ensure that appropriate funding instruments are put in place to attract private and public investments into the sector.
4. Make provision for a reliable supply of good-quality and affordable seed and feed to all fish farmers.
5. Ensure adequate investment in the undertaking of aquaculture research and development to ensure technical knowledge and transfer of technology which will make the aquaculture sector highly competitive.
6. Implement environmental and biosecurity programmes to assure food safety and enhance quality of aquaculture products.
7. Increase South African aquaculture products' market share locally and internationally.
8. Ensure information management and dissemination to create awareness and promote aquaculture as a socially, environmentally and economically viable activity.
9. Create partnerships and coordination between various government departments, industry and the private sector.
10. Invest in capacity building and skills development in government, fish farmers and the private sector.

Currently, the main species that are being cultured commercially in South Africa are abalone, trout, oysters, dusky kob, mussels, tilapia, catfish., and ornamentals. There are efforts to expand the current base with a focus on new species like scallops, sea urchins, spotted grunter, silver kob, white stumpnose, yellowtail, etc.

Table 9: Aquaculture value chain

Shellfish: Farmed abalone currently has a high employment multiplier effect (1 direct job per 1-2 tons of shellfish produced). It has grown at an average of 7% per year over the last 10 years, and South Africa is a net exporter (95% to South East Asia).

Freshwater Finfish: Farmed trout currently has a medium employment multiplier effect (1 direct job per 4-5 tons of fish produced). It has grown at an average of 5% in the last 10 years and SA is a net importer (almost 50% if not more of imports) and competes with salmon.

Marine Finfish: Farmed dusky kob currently has a medium employment multiplier effect (1 direct job per 4-5 tons of fish produced, with a potential to improve). It is still a new commodity which has grown from a zero base, and grown at around 600% in the past two years. There are currently no imports of farmed dusky kob, so it competes with wild caught dusky kob (listed as orange in the South African Sustainable Seafood Initiative Programme) in domestic markets. It is making inroads as a commodity of choice and a substitute to wild capture dusky kob locally, and recently attracted interest from Asia and Australia. As line fish, it will appeal to a variety of markets, especially those for line fish.

Product	Labour indicator	Real average growth (10 years)	Market share	Volatility index	Trade balance	Import substitution
Farmed abalone	High Performer	Medium growth industry	Bottom 14	Moderate volatility	Net exporter	N/A
Farmed trout	Medium Performer	Medium growth industry	Bottom 14	Moderate volatility	Net importer	Yes
Farmed dusky kob	Medium Performer	Medium growth industry	Bottom 14	Moderate volatility	Net importer	Yes

Main challenges and constraints:

- High start-up and operational costs
- Need for training & education
- Need for further R&D
- Need for market development
- Need for more efficiency in the issuing of sale permits
- Lack of availability of and access to information
- Breeding material
- Challenges in complying with environmental regulations

Nature of intervention

Government has identified the need to select suitable aquaculture sites, both land- and sea-based, that can be utilised for aquaculture development. A Strategic Environmental Assessment (SEA) was conducted, using Geographic Information Systems (GIS), to identify suitable sea-based sites inshore and offshore, and inland sites. The approach includes the establishment of Aquaculture Development Zones (ADZs) as catalysts to aquaculture development. An ADZ in this context refers to any zone or area in water or land, set aside for the exclusive use by the aquaculture sector and in which specific measures are taken to encourage the sustainable development of aquaculture. ADZs have been used for successful development of the aquaculture industry in both developed and developing countries, including Hong Kong and Namibia. The nature of interventions within these ADZs will be an integrated approach to the promotion of investment in production and infrastructure development in aquaculture to improve competitiveness and broaden participation at all levels. Interventions will increase outputs and employment creation, promote national spread of aquaculture and ensure that more Previously Disadvantaged Individuals (PDIs) participate in commercial aquaculture. It is further estimated that every R100 million government invests will attract R1 billion of private sector investment, resulting in 1200 direct jobs and& 2400 indirect jobs in the next five years. Interventions will increase outputs and employment creation, promote national spread of aquaculture and ensure that more Previously Disadvantaged Individuals (PDIs) participate in commercial aquaculture.

Key milestones

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q1	2014/15	Department of Agriculture, Forestry and Fisheries (DAFF) and Department of Environmental Affairs (DEA) to harmonise list of aquaculture species in the Alien and Invasive Species (AIS) regulations	Department of Environmental Affairs (DEA)	DAFF (CD: Aquaculture & Economic Development); Aquaculture South Africa
Q1	2014/15	DAFF and the Department of Rural Development and Land Reform (DRDLR) to finalise the business plan for Qolora ADZs for implementation	DAFF (CD Aquaculture and Economic Development))	DRDLR; Eastern Cape Agriculture, Qolora Municipality; Eastern Cape Development Coorporation (ECDC)
Q1	2014/15	Formalise export and import health certification and health guarantees for humans for aquaculture products, with industry and NRCS	DAFF (CD Aquaculture and Economic Development)	National Regulator for Compulsory Standards (NRCS); Aquaculture South Africa; dti
Q2	2014/15	Upgrade of the Turfloop Hatchery and the aquaculture nursery at University of Limpopo (ULIM) for production of tilapia and catfish fingerlings	Limpopo Department of Agriculture & Rural Development (LDARD)	DAFF (CD: AED); University of Limpopo (ULIM)

Key milestones continued

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q2	2014/15	DAFF and industry to identify and establish new sites for trout production	National Trout Forum (NTF)	CD AED, PDAs, Aquaculture South Africa
Q2	2014/15	Finalise the aquaculture business plan for East London Industrial Development Zone (EL-IDZ) Incubation Project.	East London Industrial Development Zone (ELIDZ)	CD AED; dti, DST, Eastern Cape Agriculture; ECDC
Q2	2014/15	Initiate an EIA for Saldanha Bay (inner and outer bay) for bivalve shellfish and salmon.	CD Aquaculture and Economic Development	DEA, WC PDA, WC Environmental and Development Planning, WC Aquaculture Development Initiative (WCADI), Cape Nature, National Ports Authority, Bivalve Shellfish Farmers Association
Q4	2014/15	Establish a Tilapia Sector-Specific Innovation Project at University of Limpopo	CD Aquaculture and Economic Development	University of Limpopo, Tilapia Aquaculture Association of South Africa (TAASA)
Q4	2014/15	DAFF to identify additional areas for the allocation of abalone ranching rights in the Western Cape	CD Aquaculture and Economic Development	WC PDA, DEA
Q1	2015/16	Comprehensive Agriculture Support Programme (CASP) and Ilima/Letsema to put aside at least R200 million towards aquaculture support in all nine provinces (to support new entrants and new projects)	DDG: Food Security & Agrarian Reform, CFO	PDAs, CD AED
Q1	2015/16	DAFF and the DRDLR to finalize the business plan for establishment of the Matzikama ADZ	CD Aquaculture and Economic Development	Matzikama Municipality, WCADI, WC PDA, dti, DRDLR, Aquaculture South Africa
Q1	2015/16	DAFF and Limpopo Department of Agriculture and Rural Development (LDARD) to investigate the development of a business plan for the Integrated Aquaculture-Irrigation Programme, for implementation	CD Aquaculture and Economic Development	LDARD
Q1	2015/16	Initiate development of new markets for Aquaculture products in the Persian Gulf, Canada, United States of America (USA) and the European Union (EU)	CD Agro-processing & Marketing, CD Aquaculture and Economic Development	Aquaculture South Africa, dti
Q2	2015/16	DAFF to operationalise the establishment of the National Aquaculture Development Initiative (NADI).	CD Aquaculture and Economic Development	PDAs, Aquaculture South Africa

Key milestones continued

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q3	2015/16	Introduce a feasibility study for Incubation support through Universities	CD Aquaculture and Economic Development	Universities, DST, dti
Q3	2015/16	DAFF, Provincial Departments of Agriculture (PDAs) and industry to develop a Hatchery Development and Management Programme (linked to SIP 11)	CD Aquaculture and Economic Development	PDAs, Aquaculture South Africa, DST
Q3	2015/16	Establish a National Aquaculture Product Marketing and Development Strategy and programme	CD AM	PDAs, CD AED, Aquaculture South Africa, dti
Q1	2016/17	PDAs to set up Aquaculture Commodity Project Allocation Committees (ACPAC) for dispensing CASP and Ilima/Letsema funds to start-up and community projects	DDG: Food Security & Agrarian Reform, CFO	PDAs, CD AED
Q1	2016/17	DAFF and industry to investigate the use of renewable energy in aquaculture operations	Abalone Farmers Association of South Africa (AFASA)	CD Fisheries Research & Development, Department of Energy (DOE), DEA, DST
Q1	2016/17	Finalise business plan for Incubation support through universities	CD Aquaculture and Economic Development	Universities, dti
Q1	2016/17	DAFF and Kwazulu-Natal Department of Agriculture, Rural Development and Environmental Affairs (KZNDARDEA) to conclude EIAs for Amatikulu ADZ and develop business plan	CD Aquaculture and Economic Development	KZN PDA, DEA
Q1	2016/17	DAFF and DRDLR to develop business cases for five new ADZs	CD Aquaculture and Economic Development	DRDLR, dti
Q3	2016/17	Department of Water Affairs (DWA) to revise policy for aquaculture water use under National Water Act (NWA)	DWA	CD Aquaculture and Economic Development
Q3	2016/17	Develop the value chain for catfish, tilapia and trout	CD AM	PDAs, dti
Q4	2016/17	Support the branding of aquaculture products	CD AM	dti

5.11 Improved compliance enforcement in the fisheries sector

One of the key challenges facing this sector is the increasing rate of illegal fishing activities involving both local and foreign criminal syndicates. Over the years South Africa has witnessed a steady rise in quantities of illegally caught fish leaving the country. While the number of arrests has also increased, the battle is far from won. It needs to be noted that poaching of marine resources is a global phenomenon whose impact is felt to a great extent by poor coastal communities and emerging fisheries-based enterprises.

It has also been established that this kind of crime is often linked to other serious illicit activities such as arms and drugs trade, human trafficking, and money laundering, contributing to a loss of tax revenue and general lawlessness. Affected countries are responding differently to this challenge: some countries place the protection of their marine resources very high on their national security agendas by assigning this responsibility to their armed forces, while in others marine protection is in the hands of civilian government control. South Africa falls in the latter category.

Currently the Department is part of local and global structures established to combat illegal, unregulated and unreported (IUU) fishing activities. While the country has made significant progress in identifying and destroying existing poaching networks, new highly organised and sophisticated syndicates are emerging on a regular basis. This scourge will continue to pose a challenge to government's efforts to transform and grow the sector, and to successfully implement the small-scale fisheries policy and other related initiatives.

Nature of intervention

Integrated Fisheries Security Strategy will consist of a multifaceted approach focusing on both socio-economic empowerment of affected coastal communities, and investment in viable and sustainable security arrangements and infrastructure. Priority should be given to the provision of trained and competent personnel and an investment in new technologies to monitor and to respond to potential threats.

Key milestones continued

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q4	2014/15	Finalise Memoranda of Agreement (MOAs) with all relevant law enforcement agencies	CD: Monitoring Control & Surveillance	SAPS, Hawks, NPA, SANDF, Home Affairs, Ports Authority, CSIR, State Security and SARS
Q4	2015/16	Upgrading of the Vessels Monitoring System and the provision of the required surveillance technology and patrol boats	CD: Monitoring Control & Surveillance	Finance Branch - DAFF and CSIR

6. TRANSVERSAL INTERVENTIONS

APAP proposes a number of transversal interventions that complement but also go beyond the specific sectoral interventions identified above. Altogether seven transversal interventions – or 'Key Action Programmes' ('KAPs') – are included, which collectively seek to strengthen the agriculture, forestry and fisheries sectors in diverse ways.

6.1 Fetsa Tlala

Problem statement

Notwithstanding the aim of the Integrated Food Security Strategy (IFSS) of 2002 to streamline, harmonise and integrate the diverse food security programmes, food insecurity still remains a challenge for the country, especially at local household level. The problem is especially acute in deep rural areas, because rural dwellers tend to pay higher prices for staples and other foods, even while there may be under-utilised arable land nearby that could in principle be meeting at least a share of local food needs.

Fetsa Tlala is an integrated government initiative that seeks to promote food security and address structural causes of food insecurity, which continue to perpetuate inequality and social exclusion. Fetsa Tlala is aimed at more than just creating a food secure country for all South Africans, but to also to eradicate hunger. It is therefore an overarching framework to maximise synergy between the different strategies and programmes of government and civil society. In line with the framework, a set of targeted policy instruments will be implemented.

Nature of intervention

Fetsa Tlala Integrated Food Production Intervention focuses on supporting subsistence and smallholder farmers to increase the production of staples, with particular attention to bringing under-utilised arable land in the former homelands into production. The Intervention rests on five pillars, namely: 1) land capability; 2) mechanisation support services; 3) production inputs and infrastructure; 4) agro-processing and market development; and 5) capacity building. Fetsa Tlala is designed to capacitate farmers to work their land optimally. This means the infrastructure and mechanisation components are paramount to the success of the programme. Fetsa Tlala targets three different kinds of farmers, namely farmers in the former homelands, land redistribution beneficiaries, and farmers on irrigation schemes. It is imperative that projects which are identified can unlock the potential of land currently lying fallow in former homeland areas and on properties transferred via land reform. In broad terms, all projects to be identified must have a clear costing structure and tangible benefits that will contribute in the fight to uplift rural communal areas and reduce poverty in these areas.

Maize and dry beans as main staples will be prioritised, with sunflowers and sorghum as the third and fourth products (other crops will be considered considering that, in order for the nutritional aspect to be addressed, there have to be micro nutrients). This is based on the suitability of these crops in the various parts of the selected provinces. The goal will not only be to put fallow land into production, but also to improve yields and productivity. A diversified approach to marketing will be pursued, with an emphasis on local markets where appropriate. In areas where Fetsa Tlala will stimulate significant amounts of additional maize production, Fetsa Tlala will seek to establish storage and milling capacity, while arranging for local marketing of the maize meal.

Key milestones continued

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q4	2014/15	Supporting smallholders to incrementally supply 40% of the grains required by the World Food Programme for the Lesotho initiative. Increased production Capacity building programme for smallholders	CD Food Security, CD Agro-processing and Marketing, FAO, WFP	PDAs
Q4	2014/15	EXCO approved Smallholder Development Policy to address smallholder's constraints	CD Food Security	Sector organisations, civil society, NAMC, dti, DRDLR, DWA, DEA, PDAs
Q4	2014/15	Finalise SMME-based mechanisation programme		ARC, PDAs
Q4	2014/15	Initiate Farmer Field School pilots in three provinces (GP, NW and EC)	CD Food Security	PDAs, Agri-SETA
Q1	2014/15	Public /Private Extension support programme; collaborative agreements with selected commodity organisations and the ARC for up-skilling extension officers	CD National Extension Support, CD Food Security	Commodity organisations, PDAs
Q4	2015/16	Analyse feasibility of small-scale maize milling enterprises, identify 5 pilot locations, and initiate business development	NAMC	DAFF, dti, PDAs
Q4	2015/16	Providing access to new and improved cultivars within the priority in maize, bean and potato cultivars developed, with higher yields or nutrient content and insect and disease resistance to smallholders and subsistence farmers	ARC	DAFF
Q4	2015/16	Establishment of Agricultural Development Centres (ADCs)	ARC	DAFF
Q4	2018/19	Mobilise and support smallholder and subsistence producers to better utilise fallow land in communal areas, and land reform projects, targeting 1 million hectares by March 2019	CD Food Security	PDAs

6.2 Research and Innovation

Problem statement

Innovations are new creations of economic significance of a material or of an intangible nature, and play a central role in the productivity and sustainability of the sectors and therefore in keeping the sectors globally competitive. South Africa's recently approved Bio-economy strategy, published by the Department of Science and Technology (DST), identifies agriculture as a key sector. The Bio-economy strategy argues for a focus on bio-innovation, particularly those with industrial applications and potential to create job opportunities. The capacity of agriculture, forestry and fisheries to support an 'innovation value chain' – comprising IKS and basic research, applied research, product development, incubation and manufacturing, and marketing and commercialisation – is therefore critical in keeping with the policy imperatives described in the NDP and NGP.

Of concern in South African agriculture, is the high cost of technology and implications on cost of production. Commercial farmers have historically been relatively well advanced in terms of technology, although quite dependent on imported technology, whether through imported machinery and agrochemicals, or under license as is the case of genetically modified (GM) seed. On the other hand, smallholders and subsistence producers have been less endowed in terms of technology. The question is why South Africa's innovation system is unable to support a growing commercial sector and a needy smallholder sector. With the limited data available, it shows that innovation within the commercial sector has been the main driver in the growth of South Africa's agricultural exports, while the innovative response by the smallholder sector seems to have been much more limited. Furthermore, research and technology development is of particular importance in the management of our natural resource base within fisheries. A huge percentage of current government-funded and managed research projects within fisheries, is directed at managing the natural resource base, which in turn informs existing management systems.

Agricultural research is undertaken by a variety of organisations in both the private and the public sectors. The National Agricultural Research and Development Strategy (2008) provides basic guidelines in terms of the focus of research activities among organisations. As a result, a number of different organisations focus on similar impacts, functions and/or facilities.

The main public research institutions in the agricultural research system are the ARC, Water Research Commission, CSIR, 11 Higher Education Institutions through their agriculture schools and faculties, and the nine provincial agricultural departments. In 2007, 76% of all spending on agricultural research in South Africa went through these institutions (50% through the ARC; 12% through Higher Education Institutions, and 15% through other public research institutions (e.g. WRC, CSIR etc.), as set out in the table below.

The private sector consists of both private for profit and non-profit organisations. Non-profit organisations generally focus research on sugar, forestry, and marine fisheries and the environment. The main focus of the private sector is on growth and competitiveness impacts. While the research functions of the private sector cover the full spectrum from technology creation to diagnostics, their research facilities exclude experimental farms and national assets. An estimated 23,6% of agricultural research was conducted by private R&D institutions in 2007. This ratio is high compared to the 7% and 11% contributions in Brazil and India, respectively, and even high compared to a developed country such as Australia (16% in 2005). The private sector's research contribution is only low compared to developed countries where agricultural R&D is roughly shared between the public and private sectors. For the South African economy as a whole, close to 59% of agriculture R&D was spent through private sector research institutions in 2007/08 (ARC Mandate Review, 2010).

Table 10: Agricultural research expenditures in South Africa, 2000 and 2007

Organisation	R million 2000	R million 2007	Contribution % 2000	Contribution % 2007
Agricultural Research Council (ARC)	391,6	695,6	66,8%	49,9%
Higher Education	96,1	159,8	16,4%	11,5%
Other public institutions (WRC, CSIR etc.)	43,2	208,7	7,4%	15,0%
Private (profit and non-profit)	55,3	329,5	9,4%	23,6%
Total	586,2	1393,6	100%	100%

Whilst the ARC is still the dominant organisation in agricultural R&D, contributing 50% towards research spending in 2007, there has been a shift since 2000 in agricultural research expenditure away from the ARC and higher education institutions, towards the other public institutions (including provincial governments) and the private sector. In order to improve research coordination, prioritisation of research and address the problem of overlapping mandates, the National Agricultural Research Forum (NARF) was established in 2003. NARF is a voluntary stakeholder forum that is mainly responsible for national processes of priority setting to develop the agricultural research agenda, this body has however not been functional for the past 5 years.

Nature of intervention

Critical in ensuring global and domestic competitiveness within the sector, is our capacity to make strategic investments across the innovation value chain. These must include investments in human capital, basic research and indigenous knowledge systems; applied research and innovation; product development; technology transfer, incubation and manufacturing; marketing and commercialisation. To effect investments requires effective decision making, and in turn effective information management and decision support systems.

Our interventions thus include the establishment of appropriate national bodies with the purpose of setting the national R&D agenda for agriculture, forestry and fisheries, to guide and monitor agricultural innovation, but furthermore to determine the regulatory environment to ensure accessibility of technology, both in terms of affordability and technology transfer. Interventions further include the establishment of innovation hubs, demonstration centres and experimental farms to ensure effective knowledge and technology transfer; development of energy efficient production systems in identified production and processing systems (see sectoral KAPs).

Key milestones continued

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q4	2014/15	Establish appropriate national structures with the purpose of determining the national research agenda, further determining relevant policy interventions to ensure accessibility and affordability of technology.	DST	DAFF, ARC, CSIR, WRC, universities, TIA
Q4	2015/16	Design and develop alternative energy efficient production systems	CD Animal Production and Health, CD Plant Production and Health	ARC, DST
Q4	2015/16	Improved Water Management and Irrigation practices, with focus on: • Improving irrigation and water infrastructure and systems • Water quality improvement and Hydrological modelling	CD Natural Resource Management	DAFF, DWA,WRC
Q4	2015/16	Assessment and impact analysis of National Assets (R&D): • Weather station network • Soil information systems • Biosystematics • Management of the national asset collections	CD Policy Development and Planning	DAFF
Q4	2016/17	Design and implement an integrated Knowledge and Information Management System, allowing for the integration of all relevant data layers, capable of supporting decision making and planning within the sector.	CD Programme Development and Planning	DAFF, CSIR, EDD

6.3 Promoting Climate-Smart Agriculture (CSA)

Problem statement

The definition of climate-smart agriculture (CSA) has evolved over the past few years, particularly in relation to the concept of sustainable agriculture. An important question is how CSA differs from sustainable agriculture and how CSA differs from Conservation Agriculture (CA). The CSA approach involves three objectives, namely sustainably increasing agricultural productivity, reducing greenhouse gas emissions, and increasing resilience and adaptation.

FAO defines climate-smart agriculture as an agriculture that sustainably increases productivity, resilience (adaptation), reduces/removes greenhouse gases (mitigation) while enhancing the achievement of national food security and development goals. Climate-smart agriculture is aimed at transforming agriculture and adopting practices that are sustainable. This refer to the adoption of production systems that reduce greenhouse gas emissions, adapt to climate change, and reduce thus minimise vulnerability.

The Department of Agriculture, Forestry and Fisheries supports the development and implementation of climate-smart agriculture as a means of adaptation and mitigation against the adverse impacts of climate change. Climate-smart agriculture in South Africa would be based on the following production systems, namely organic farming, agro-ecology and conservation agriculture.

Organic agriculture refers to a production system that does not allow the use of synthetic production inputs like fertilisers and pesticides. It advocates the adoption of production practices that simultaneously mitigate climate change, build resilient farming systems, reduce poverty and improve food security. Organic production emits much lower levels of greenhouse gases (GHG), and quickly, affordably and effectively carbon in the soil. In addition, Organic production helps to make farms and people more resilient to climate change, mainly due to its water retention efficiency, resilience to extreme weather events and lower risk of complete crop failure.

Agro-ecology is a form of agriculture when and where properly implemented provides all the solutions for soil fertility, natural parasites, pest and weed control, and the potential hazards associated with continuous irrigation. The principle of agro-ecology is that a healthy soil enables healthy pastures and crops. Agro-ecological practices use sustainable grazing, in contrast to the common practice in South Africa of over-grazing, a consequence of breeding for money rather than to produce to keep the land sustainable.

Conservation agriculture (CA) is a farming approach that fosters natural processes to increase agricultural yields and sustainability by minimising soil disturbance, maintaining permanent soil cover, and diversifying crop rotations. Construed more broadly, CA also encompasses natural resource management at the farm, village, and landscape scales to increase synergies between food production and the conservation and use of ecosystem services. CA provides a context management strategy that includes diverse practices such as livestock and fodder management, improved fallows, agro-forestry, and watershed management. Where crop production is concerned, CA can maintain or enhance yields, while reducing the consumption of diesel and chemical fertilisers by 40% to 60%. The improvement of soil structure together with the maintenance of soil cover mean that in rainfed systems, more water is absorbed and retained, which is largely why during Kazakhstan's drought of 2012, wheat farmers who practiced CA had yields which were three times higher than those who did not, and uptake of CA is one of the main reasons Kazakhstan has emerged as a major wheat exporter. Thus CA is very much a form of climate-smart agriculture.

By the year 2050, the world will be expected to feed an extra billion people. There needs to be a mechanism to attract investments to take CSA off the ground, in order to produce more food in a way that will not negatively affect the climate or the underlying resource base. That could be achieved through sustainable production practices such as organic farming, agro-ecology and conservation agriculture, minimising the use of pesticides, fertilisers, fungicides and insecticides; while helping to sustain ecosystems and improving both the production and quality of nutrition.

Climate-smart agriculture includes proven practical techniques – such as mulching,



intercropping, conservation agriculture, crop rotation, integrated crop-livestock management, agroforestry, improved grazing, and improved water management – but also innovative practices such as better weather forecasting, early warning systems and risk insurance. Although CSA may be regarded as a fairly new concept, especially in Africa, it has been implemented successfully in many African countries.

Nature of intervention

There is evidence to indicate the successes of climate-smart agriculture in parts of Africa. For example, in Niger 55 million hectares generated 500 000 tonnes of cereals per year, benefiting 1,25 million people. In Burkina Faso, small-scale farmers have been using water harvesting techniques to increase yields. Vulnerable communities need to have their human and social capital needs taken care of, so as to enhance their adaptive capacity to climate change. The need for funding is to increase food security, to respond to the food price crisis, to promote climate-resilient development and generally to support climate change adaptation and mitigation.

Interventions and monitoring activities must be farmer driven, as there are more successful than top-down models because they empower farmers and make them owners of the solutions. There is a need for policy development driven by human capital with farmers, women, and youth at the centre of attention and resources. It is important that institutions work with different sources of financing to put the three pillars of CSA into practice. Therefore, there is a need for generating evidence for interventions, financing climate change interventions and creating an enabling environment, in directing and supporting interventions and the constraints to agricultural productivity and food security in the era of climate change.

Key milestones continued

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q2	2014/15	Design measurement framework to monitor extent of uptake of CSA	ARC	CD Natural Res Mgt
Q3	2014/15	Initiate research programme and package research outcomes in simple and understandable language especially for farmers	ARC	CD Natural Res Mgt
Q3	2014/15	Develop pilot of area-wide soil and veld care plans for selected former homeland areas	CD Natural Res Mgt	PDAs, Grain SA, ARC
Q4	2014/15	Create farmer incentive programmes for the implementation of CSA best practices and climate-smart strategies	CD Natural Res Mgt, CD Food Security	PDAs, ARC, Grain SA
Q4	2014/15	Conduct baseline survey on state of soil resources across South Africa	ARC	CD Natural Res Mgt
Q4	2014/15	Development of incentive system to encourage farmers to take up CSA	CD Natural Res Mgt	ARC
Q4	2014/15	Climate-smart agriculture systems enabling mitigation and adaptation to climate change, with a focus on: • Earth observation technologies for climate observations & disaster events • Management of alien invasive species • Forecasting and early warning systems for extreme climatic events • Design and test green technologies and processes to mitigate the impact of agriculture on the environment	ARC	DAFF, DWA, CSIR, SAWS
Q4	2015/16	Develop CSA capacity building programme for extension officers, for large-scale commercial farmers, including establishing on-farm demonstrations in all 9 provinces	CD National Extension Support	CD Natural Res Mgt, PDAs, Grain SA, ARC
Q4	2015/16	Develop knowledge management, including platforms for best practices, e.g. conservation agriculture, agro-forestry, and community-based natural resource management	CD National Extension Support	CD Natural Res Mgt, PDAs, Grain SA, ARC
Q4	2015/16	Initiate Farmer Field School pilots in three provinces with focus on CSA for benefit of subsistence producers and smallholder farmers	CD National Extension Support	PDAs
Q1	2016/17	Improved conservation agriculture systems developed with focus on: • Specific commodities as noted above, e.g. soybeans, maize, wheat, cotton and sorghum • Climate-smart agricultural production systems and technologies • Improved irrigation practices and techniques	ARC	DAFF
Q4	2016/17	Partner with private sector, provinces and other national departments to implement support programmes for organic smallholder farmers	CD Plant Production and Health	PDAs, dti, retailers, IDC

6.4 Trade, Agri-business Development and Support

Problem statement

Lack of access to finance has been identified as one of the constraints faced by small-scale operators in the agriculture, forestry and fisheries sectors. The need to provide affordable financial services was identified and following this government took a decision to establish a loan financing scheme that would provide loans at affordable interest rates specifically for smallholder producers / operators. This led to the establishment of the Micro Agricultural Financial Institutions of South Africa (MAFISA) scheme in 2004/05, based on a once-off capital allocation. No annual injection to recapitalise the scheme was envisaged on the idea that the scheme was to grow itself through optimal loan recovery rates and from interest earned by both the loans disbursed and funds warehoused with the Land Bank. The products offered include production loans, facilitation of saving mobilisation, and capacity building for member-owned financial intermediary institutions.

Nonetheless, provision of sustainable financial services to these sectors has proven to be difficult. Various approaches have been tried and it appears there is no single approach that is capable of addressing the challenge on its own. However it remains necessary and important to provide the service to the sectors. It is therefore important to understand the nature of the demand and use of credit in order to develop appropriate products and delivery mechanisms for the sector.

Furthermore, many smallholder farmers are not registered as legal entities and do not keep operational and financial records, which limits their access to finance and potentially reliable and sustainable markets. Due to their location, a large number of smallholder producers are unable to access the main road networks, which limits their ability to receive inputs and distribute their produce timeously. Their low and inconsistent production volumes as well as their distance from markets increase their cost of doing business. Their bargaining power and negotiation skills are limited. Limited access to finance hinders expansion and access to value-adding and agro-processing infrastructure which could lead to increased income generation. Lack of adequately skilled human capital has also been found to be a serious constraint for smallholder enterprises. Many smallholders are illiterate, and have poor technological and business management skills. Government and private sector support interventions/programmes for SMMEs are fragmented, and access to these interventions is limited.

Up to now, cooperative development has been overly focused on establishing and/or supporting primary cooperatives. While these may have their role, it is now clear that this was the wrong emphasis, rather what are needed are marketing or secondary cooperatives. Moreover, while there is an argument for creating separate marketing cooperatives for black smallholders, there is also a case to be made for supporting non-racial cooperatives, because: it is also important to support the smaller stratum of large-scale commercial farms, which have been neglected in recent years; racially inclusive cooperatives have the potential to promote harmony and cooperation in the rural economy; and a larger pool of farmers are likely to allow for more robust cooperatives.

Nature of intervention

DAFF will provide financial services to smallholder operators through partnerships with private sector entities. One of the tools that can be used in this regard is the Manufacturing Competitiveness Enhancement Programme (MCEP), which offers a new suite of incentives for existing manufacturers that is designed not only to promote competitiveness, but to ensure job retention. MCEP consists of 1) industrial financing loan facilities managed by the IDC; and 2) production incentive grants administered by the dti. In partnership with the dti, DAFF proposes an incentive grant targeted at manufacturing companies within agriculture, forestry and fisheries, to support SMMEs across the value chain. This will enable the Department to leverage financial resources from the private sector.

In addition to this, there is a need to develop an appropriate policy to guide the provision of financial services in the sector. To this effect a development finance policy framework (DFPF) is currently being crafted. This is complemented by a review of the MAFISA Credit Policy. Another milestone will be to have partners that will assist in the implementation of the policy directives. These partners will play various roles such as serving as access points, provision of mentorship, etc.

Cooperative development has been found to be one of the most effective interventions to strengthen and grow smallholder farming enterprises. This could lead to long-term food security, job opportunities and income generation. The formation of structures such as Commodity Based Marketing Cooperatives could assist smallholder farmers in increasing their bargaining power and negotiation skills. Through these structures, farmers could pool their produce to access bigger markets. They can buy production inputs in bulk which could contribute to lowering their input costs. To further strengthen SMMEs in the sector, access to productive resources and market opportunities can be achieved through partnerships and linkages between smallholder producers and commercial businesses. The level of participation of SMMEs along the entire value chain can then be increased. If government organised agriculture and private sector work together they can provide the necessary business and technical training required to capacitate smallholder producers in the sector, as well as to improve the prospects for the smaller stratum of large-scale commercial farms.

Key milestones continued

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q1	2014/15	Formulation and finalisation of regulations for "set aside programme"	CD Development Finance	Dti, NT
Q3	2014/15	Commodity-based Cooperative Development Programme in partnership with commodity organisations	CD Cooperative & Rural Enterprise Development	dti, commodity organisations, agri-business
Q4	2014/15	National training programme in financial literacy for farmers and SMMEs across the value chain	CD Development Finance	Agri-SETA, PDAs
Q4	2014/15	Participation in the COMESA-EAC-SADC Tripartite Free Trade Area Negotiations	CD International relations and Trade	dti
Q4	2014/15	Implementation of the MoU with the International Trade Centre on capacity building	CD International relations and Trade	
Q4	2015/16	MCEP window designed for developing an incentive programme for smallholder farmers and SMMEs across the value chain	CD Development Finance	dti, NT, PDAs
Q4	2015/16	Development finance policy finalised dealing with insurance, funding models for small-scale producers in Agriculture, Forestry and Fisheries	CD Development Finance	NT, DFIs, Agricultural Development Finance Forum

6.5 SIP11

Problem statement

South Africa's agricultural sector is facing two enormous challenges simultaneously. First, domestic producers are exposed to increasing competition from low-priced imports – especially of processed foods – while South Africa's agricultural exports are meeting ever stiffer competition in foreign markets. And second, South Africa is still in the process of correcting for the Apartheid and colonial era 'separate development' policies that resulted in the extreme marginalisation of black farmers, foresters and fisher-folk. These challenges are set against the common background of rising energy costs, which affects the costs of both production and marketing; and a tendency towards ever greater concentration and centralisation of downstream agro-processing capacity and distribution networks. Infrastructure investment plays a key role in addressing both of these challenges. In respect of improving competitiveness, infrastructure investment is necessary to reduce the 'costs of doing business' for farmers as well as role-players situated upstream and downstream in the value chain. Key issues include transport costs, access to appropriately located and equipped storage and processing facilities, and accurate, timely information upon which private sector and government actors can make decisions. The importance of improving the collection and dissemination of information is all the greater in light of the elimination of the single-channel marketing systems that applied to most commodities prior to the 1990s. One undesirable consequence of these challenges is that they have contributed to the creation of an environment where, within South Africa, smaller farms are less and less able to compete with larger farms – not because larger farms are more productive, but because they enjoy advantages in marketing. One implication is that smaller commercial farms continue to disappear at an alarming rate, and many farm jobs with them; another implication is that land reform beneficiaries struggle to establish themselves, because they tend to fall within the large stratum of smaller commercial farms.

While there are infrastructure challenges across South Africa that have the effect of hampering the competitiveness of our agricultural sector, in former homeland areas the problem is especially severe. In effect, the long era of unequal development has not yet been corrected for, meaning that large swathes of potentially productive land are not being used optimally, further contributing to rural unemployment and under-employment.

Nature of intervention

In 2011 the Presidential Infrastructure Coordinating Commission (PICC) was established in order to drive and oversee the implementation of a massive infrastructure development drive. This drive consists of a number of generally sectoral 'Strategic Infrastructure Projects' (SIPs), of which the eleventh is on 'Agro-logistics and Rural Infrastructure', otherwise known as 'SIP 11', aims to identify and coordinate investment in infrastructure that supports the expansion of production and employment in the agriculture, forestry and fisheries sectors. NAMC has been appointed as the SIP 11 coordinator, and is presently in the process of concluding the SIP 11 business plan. SIP 11 will address itself to different parts of the agricultural 'value-chain', broadly understood, inclusive of infrastructure to catalyse primary production, transport and marketing infrastructure, agro-processing, and information and communications infrastructure.

Key milestones continued

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q1	2014/15	National agro-logistics and rural infrastructure investment plan produced	NAMC	DAFF, DRDLR, PDAs
Q3	2014/15	Value chain analysis of required investment in infrastructure for identified commodities with highest growth and employment potential, including a national infrastructure audit and identification of infra-structure gaps	NAMC	DAFF, DRDLR, PDAs
Q4	2014/15	Institutionalise a national project management system for continuous monitoring (reporting) and as-sessment of SIP11 programme and projects (potentially covering all agriculture projects)	CD Policy Development and Planning	NAMC, DAFF, DRDLR, PDAs
Q3	2015/16	Infrastructure investment in post-harvest handling and processing facilities • Reduce bulk transport costs by progressively increasing use of rail (SIP11) • Conduct study to determine options for expanding wheat milling capacity in the Western Cape	NAMC	PDAs
Q1	2018/19	Revitalisation of irrigation scheme projects aimed at putting 1250 hectares under irrigation by 2019	NAMC	DAFF, DRDLR, PDAs

6.6 Bio-security

Problem statement

The provision of safe, nutritious food to the population remains the mandate of the South African Government as envisioned in Section 27 of the Constitution. This mandate underpins the importance and interrelationship between biosecurity and food security. Biosecurity, which is broadly defined as the ability to protect human, animal and plant life and health, is critical for national and international production and trade. The growing impact of globalisation and increased agricultural trade creates more potential for the spread and introduction of pests and diseases. Animal and plant pests and diseases not only affect food safety and security, but also threaten biological diversity and the status of natural resources. This has important consequences for agricultural economic development and competitiveness of South Africa in the global sphere. Ensuring a sound biosecurity system has a direct impact on the achievement of the National Development Plan (Vision 2030), the Integrated Growth and Development Plan, the Industrial Policy Action Plan and more importantly, the Strategic Plan of the Department of Agriculture, Forestry and Fisheries (DAFF) and the flagship food security initiative, Fetsa Tlala.

Nature of intervention

Support interventions will include:

- Develop and strengthen regulatory frameworks in the biosecurity sphere
- Promotion of regulatory compliance and training and advisory services in the field of biosecurity
- Verification and registration of production unit codes for export markets
- Control and eradication of quarantine diseases and pests
- Procurement of an electronic information management system, and
- Improvement of the early warning and early detection systems.

Key milestones continued

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q4	2014/15	Continue with the Bactrocera invadens (BI) management and eradication programme	CD Plant Production and Health, CD Inspection and Quarantine Services	PDAs, local government
Q3	2014/15	Orchard phytosanitary compliance verification for designated export markets, and phytosanitary inspections	CD Inspection and Quarantine Services, CD Plant Production and Health	Citrus industry
Q4	2014/15	Facilitate import, export and safe production of regulated agricultural products focusing on: • Implementation of awareness interventions to address economically important pests, diseases, food safety risks as well as market access and regulatory requirements • Implementation of the Sanitary and Phytosanitary (SPS) Strategy to meet international obligations and promote regional integration in support of intra-regional trade of agricultural products	CD Inspection and Quarantine Services	PDAs, CD Extension Support, dti, DoH, SARS, Animal Health Forum
Q4 On going	2015/16	Modernisation and upgrade of OBP to ensure sustainable livestock vaccine production	OBP	DAFF, NT
Q4	2018/19	Establishment of a vaccine reserve as a contingency measure in the event of livestock disease outbreaks	OBP	DAFF
Q4	2015/16	Continued manufacturing of public good vaccines (commercially non-viable) as a state service to smallholder and commercial farmers	OBP	DAFF
Q4	2018/19	Provision of smallholder farmer preventative veterinary medicine training and starter livestock health packs essential for management, production, and disease control	OBP	ARC, DAFF, PDAs



6.7 Land Reform

Problem statement

The democratic state embarked on a land reform programme in 1994 comprising three main components, namely redistribution, restitution, and tenure reform. While much has been accomplished in the past 19 years, there is growing consensus that land reform has been too slow, and has not consistently resulted in robust developmental outcomes. Through the 2011 Green Paper on Land Reform, government undertook to review all land reform policies with a view to addressing issues of historical exclusion, equitable access to land, and participation in the optimal utilisation of land.

Of the three components of land reform, redistribution has the particular strategic role of providing opportunities for farming on an individual or family basis within the boundaries of what was previously white-dominated commercial farming areas. In contrast to restitution, redistribution allows a fair degree of flexibility in shaping the types of opportunities to be created. Thus redistribution can be used to establish large-scale black commercial farmers (sometimes for instance by relocating owners of large herds out of the former homeland areas), and through subdivision can also create opportunities for smallholders. Land redistribution can potentially lead to land use intensification and employment creation in two ways: first because in many commercial farming areas land is under-utilised, and well-targeted redistribution can thus change this; and second, by promoting labour-intensive smallholdings.

The main vehicle for redistribution is the Proactive Land Acquisition Strategy (PLAS), which was introduced in 2006. While PLAS is a flexible and powerful instrument, it is recognised that it must be complemented by other measures in order to accelerate land acquisition, manage land acquired via redistribution, and promote beneficial use of that land.

Another focus of recent policy development is security of tenure for farm dwellers. Since 1994, one of the key principles of tenure reform has been to move away from subservient forms of land rights into legally enforceable rights to land, in a manner, which is consistent with the Constitution's commitment to basic human rights and equality. Significant laws promulgated in this regard and dealing with the subject matter of this policy, include the Labour Tenants Act, No. 3 of 1996 (LTA) and the Extension of Security of Tenure Act, No. 62 of 1997 (ESTA). However, the effectiveness of these laws to prevent illegal evictions, and thus increase tenure security, has been limited. In addition, neither of these policies sufficiently addressed the land rights needs of the wide range of farm dwellers, workers, tenants and occupiers. Both laws do not give adequate recognition to and protection of the rights of long-term occupiers and labour tenants who may have been the original indigenous landowners of the farms of which they were dispossessed.

The overall purpose of the proposed policy is realising a long-lasting resolution of the tenure insecurities of people working the land, as well as their enjoyment of basic human rights and expansion of opportunities to sustain livelihoods. This entails a strategy of using redistributive measures combined with share-equity and co-management schemes to create a system of positive incentives and disincentives for both farm owners and farm workers/dwellers to encourage equitable access to and ownership of land while sustaining maximum agricultural production.

Nature of intervention

To improve the performance of land redistribution and land reform more generally, DRDLR has initiated a process of institutional innovation and policy development. These are summarised as follows:

- The establishment of a Land Management Commission (LMC), which will provide adjudicatory, advisory, investigatory and repository services in respect of state land, including land held in trust for communities and traditional authorities. The LMC will be created with the passage of the Land Management Commission Bill.
- The establishment of the Office of the Valuer General, which will oversee the valuation of properties that have been identified for land reform or expropriation for purposes of determining a value as well as property that has been identified

for acquisition or disposal by a department, organ of state or a municipality.

- The enactment of the Spatial Planning Land Use Management Act (SPLUMA), which provides for a uniform, effective and comprehensive system of spatial planning and land use management for South Africa in a manner that promotes social and economic inclusion.
- The drafting of an Agricultural Landholding Policy Framework, which will provide for a district-base process of setting upper and lower bounds for the ownership and use of agricultural landholdings, which will have the effect of ensuring that 'excess' land is made available for land reform purposes.
- The drafting of a Policy on Land Ownership by Foreign Nationals (PLOF), which will regulate the terms on which foreign nationals and foreign-controlled juristic persons access land, thus ensuring that foreigners' demand for land does not compromise the State's ability to pursue redistributive land reform.
- Amending the Recapitalisation and Development Programme (RECAP), which seeks to provide black emerging farmers with the social and economic infrastructure and basic resources required to run successful agricultural business.
- Introduction of the State Land Lease and Disposal Policy, which seeks to promote conditions which enable the previously disadvantaged persons to gain access to land on an equitable basis and also promote agricultural production and capital investment in rural areas in particular; the policy adopts a targeted approach that aims to create developmental pathways appropriate to different categories of farmers across the size spectrum.

Regarding farm tenure security reform, two possible options are proposed and are still under discussion:

- Option 1 calls for the establishment of a system of incentives and disincentives for strengthening relative rights of people working the Land, which would maintain the current regime of tenancy protection and derived rights, but balance this with the introduction of a regime of duties and responsibilities that the farm worker/dweller must observe and comply with, in order to sustain the regime. Depending on the number of years during which the farm worker/dweller has provided disciplined service on the land, he/she will be entitled to a defined equity share of the land, based on its market value.
- Option 2 involves the amendment of Section 16 of the LTA to include all categories of people living and working on commercial farms, so that people currently residing and working the land within the freehold farming areas will be allowed to lodge claims for ownership or partial ownership of the land.

Key milestones continued

COMPLETION DATE Quarter	Year	KEY MILESTONES	LEAD DEPT./AGENCY*	SUPPORTING DEPTS./AGENCIES*
Q1	2014/15	Clarify the preferred policy approach for effecting farm tenure security reform	DRDLR	
Q4	2015/16	Establishment of a Land Management Commission	DRDLR	PDAs
Q4	2015/16	Establishment of the Office of the Valuer-General	DRDLR	PDAs
Q4	2015/16	Development of and testing of systems to implement the Spatial Planning Land Use Management Act (SPLUMA)	DRDLR	DAFF, COGTA
Q4	2015/16	Finalise the Agricultural Landholding Policy Framework and develop implementation systems	DRDLR	DAFF
Q4	2015/16	Finalisation of the Policy on Land Ownership by Foreign Nationals (PLOF)	DRDLR	PDAs
Q4	2015/16	Introduction of the State Land Lease and Disposal Policy	DRDLR	PDAs

7. APAP PLANNING, MONITORING AND EVALUATION

7.1 APAP Planning Processes

The success of APAP lies in our capacity to institutionalise the planning, monitoring and evaluation thereof. As a consensus document between government, the sector, labour, and civil society, APAP provides a platform of engagement through which the sector and other stakeholders are able to identify binding constraints and required interventions. Our capacity to manage this process is critical to the success of APAP.

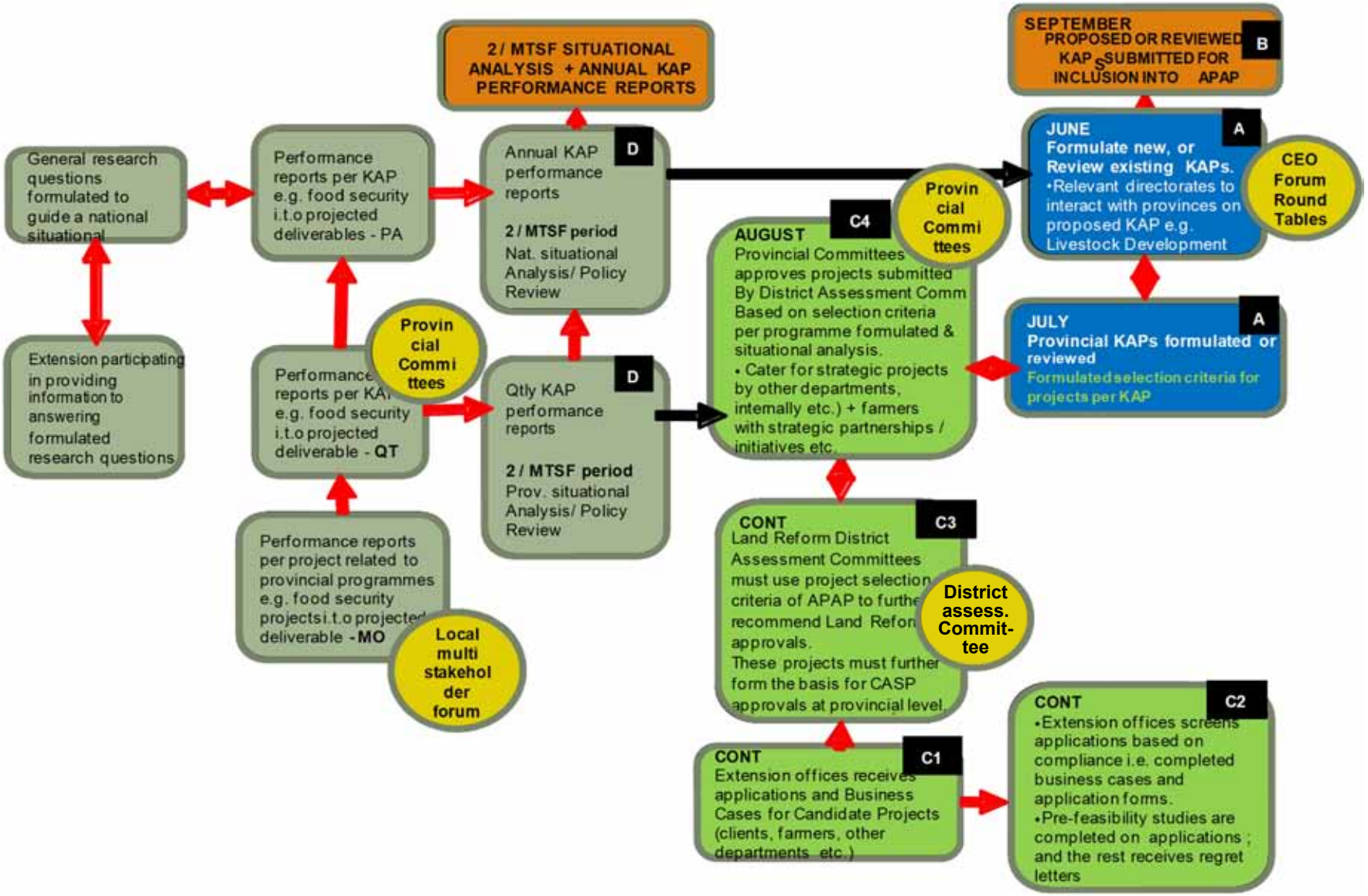
This section details the 'what', 'when', and 'how' of the APAP process, illustrated in the figure below.

Key in the institutional arrangements and process of APAP, are commodity groups, established forums through which all stakeholders are able to interact, table their concerns, and reach consensus on what should be addressed both nationally and provincially, on an annual bases. These stakeholders include provincial departments of agriculture, government, sector organisations, labour and civil society.

Commodity groups will be responsible for the formulation, review, monitoring and evaluation of respective deliverables agreed upon and included in Key Action Programmes (KAPs).

Furthermore, critical in ensuring APAP's reach and impact, is an integrated, seamless planning process between national and provincial departments of agriculture. Provincial departments of agriculture must be able to translate KAPs, more especially commodity-based KAPs, into provincial programmes and projects, e.g. if the construction of handling facilities is deemed critical for livestock development, then provinces such as North West must be able to translate such KAPs into a provincial version thereof, detailing projects, activities and their location, etc.

The following summarises the planning, monitoring and evaluation process of APAP, attempting to bring together sector organisations, and other stakeholders, through integrated planning, monitoring and evaluation processes whereby constraints are methodologically identified through properly structured situational analysis, and KAPs are formulated and reviewed with the aim of addressing identified constraints.


2 / MTSF SITUATIONAL ANALYSIS + ANNUAL KAP PERFORMANCE REPORTS
SEPTEMBER
PROPOSED OR REVIEWED KAPS SUBMITTED FOR INCLUSION INTO APAP
B
General research questions formulated to guide a national situational
Performance reports per KAP e.g. food security i.t.o projected deliverables - PA
Annual KAP performance reports
D
2 / MTSF period
Nat. situational Analysis/ Policy Review
JUNE
Formulate new, or Review existing KAPs.
•Relevant directorates to interact with provinces on proposed KAP e.g. Livestock Development
A
CEO Forum Round Tables
Provincial Committees
C4
AUGUST
Provincial Committees approves projects submitted By District Assessment Comm Based on selection criteria per programme formulated & situational analysis.
• Cater for strategic projects by other departments, internally etc.) + farmers with strategic partnerships / initiatives etc.
JULY
Provincial KAPs formulated or reviewed
Formulated selection criteria for projects per KAP
A
Extension participating in providing information to answering formulated research questions
Provincial Committees
Performance reports per KAP e.g. food security i.t.o projected deliverable - QT
Qtly KAP performance reports
D
2 / MTSF period
Prov. situational Analysis/ Policy Review
Performance reports per project related to provincial programmes e.g. food security projects i.t.o projected deliverable - MO
Local multi stakeholder forum
CONT
Land Reform District Assessment Committees must use project selection criteria of APAP to further recommend Land Reform approvals.
These projects must further form the basis for CASP approvals at provincial level.
C3
District assess. Committee
CONT
Extension offices receives applications and Business Cases for Candidate Projects (clients, farmers, other departments etc.)
C1
CONT
•Extension offices screens applications based on compliance i.e. completed business cases and application forms.
•Pre-feasibility studies are completed on applications ; and the rest receives regret letters
C2

Step A – Initiation or review of KAPs

Description:

- Commodity and Transversal KAP roundtables meet to review existing, and propose new Key Action Programmes (KAPs)
- KAPs of APAP are proposed and/or reviewed annually based on national policy directives, situational analysis and performance reports of existing KAPs
- Reviewed or newly proposed KAPs are first presented to the relevant commodity group(s)
- National KAPs, where applicable, are translated into Provincial KAPs, more especially commodity-based KAPs
- Commodity and Transversal KAP roundtables, along with lead departments or agencies will be responsible for the review of KAPs based on annual performance reports.
- The planning processes of APAP will be synchronised with strategic planning processes of lead departments and agencies, thus incorporating and funding KAPs and milestones through normal budget allocation processes of National Treasury; including that of DAFF's grant funds, such as CASP and Ilema/ Letsema, and applications to the Economic Competitiveness Programme.

Table 11: Step A – roles and responsibilities

Required outputs	Responsibility	Supporting agents	Timeframe (due date)
To propose KAPs and review existing KAPs, based on situational analysis and KAP performance reports National and provincial KAP concept proposals formulated	Commodity groups Lead directorates, chief directorates or agency of the KAPs	PDAs, Sector Organisations, SOEs (ARC, NAMC)	June (annually)

Step B – Approval of KAPs

Description:

- KAP Concept Documents (inclusive of provincial KAP proposals) to be presented and approved by DAFF Exco
    - A National Report must be presented on proposed programmes, describing how national outcomes and outputs will be achieved, i.e. APAP must identify through its review process contributions to NDP and New Growth Path, etc.
- Lead DAFF directorates or chief directorates must interact with provinces, sector organisations and SOEs, before final submission of KAPs for approval
- KAPs and milestones must be submitted by lead directorates or chief directorates for inclusion in the strategic plans of DAFF and provincial departments of agriculture
- Approval processes of all grant funds must be based on KAPs and milestones identified within APAP; initial budget allocations based on strategic outline of proposed programmes and projects
- Approved programmes will be planned in detail ensuring that interventions are translated into deliverables, roles and responsibilities
- DDG: PPM&E must present a national 'picture' of approved programmes and projects in alignment with national policies and outcomes.

Table 12: Step B – roles and responsibilities

Required outputs	Responsibility	Supporting agents	Timeframe (due date)
Approval of KAPs nationally and provincially by DAFF Exco Submission for inclusion into provincial and DAFF strategic plans	DAFF	PDAs	September (annually)
Detailed KAP plans must be submitted and registered under APAP Approved KAPs forms part of the reviewed APAP to be finalised	DAFF to oversee APAP process under D Programme Development Support, lead directorates, chief directorates or agency of the Key Action Programmes	PDAs, Sector Organisations, ARC, NAMC	October (annually) November (annually)

Step C1-4 – Project initiation

- Projects identified as critical in delivering on KAPs must be introduced via Provincial Project Committees
- District Assessment Committees, responsible for assessing Land Reform applications, must use APAP project selection criteria and District Spatial Development Frameoworks, to guide their recommendations. These criteria and selection process will further inform, how other grant funds such as LandCare, CASP etc. are allocated. This will ensure synergy between Agricultural grand projects, and Land Reforms projects.
- All proposed projects must undergo screening by relevant extension offices, and will be based on compliance of application processes, and spatial development frameworks (SDFs) i.e. commodity plans at district or local levels, guided by SIP11
  - o Terms of Reference for screening applications must be formulated and applications not meeting the requirements will receive regret letters; and pre-feasibility studies will be done on those who meet requirements
- Projects that have undergone pre-feasibility studies will undergo appraisal by local multi-stakeholder forums; and recommended projects will be forwarded to district committees; district committees are constituted by officials of the local municipality, community organisations, commodity groups, etc.
- District committees will further refine the project selection process, based on selection criteria per KAP defined by provincial project committees
- Local and district offices must therefore be sufficiently capacitated with administrative support to handle all applications.

Table 13: Step C – roles and responsibilities

Required outputs	Responsibility	Supporting agents	Timeframe (due date)
Project proposals received by farmers, and those identified as strategic projects by DAFF and provincial departments of agriculture, or other national departments, and business entities must submit applications via extension offices within the relevant districts Based on project business case, pre-feasibility studies must be completed and applications appraised	Provincial Departments of Agriculture, via Provincial Project Committees to oversee processes	DAFF	Continues

Step D – Performance reporting of KAPs and situational analysis

Description:

- Each Key Action Programme (KAP) will have key deliverables, lead departments and persons, which will in turn be transposed onto an Implementation & Monitoring Matrix (see table below)
- Performance reports of KAPs must be submitted quarterly according and annual reports of KAPs will be more comprehensive. This will enable monthly, quarterly, bi-annual & annual reports to the Minister, Cluster, Portfolio Committee and Cabinet
- We in turn must be able to improve on our capacity to report on the "Status" of Agriculture, Forestry and Fisheries, by enabling the effective management of knowledge and required information, for purposes of planning
- To ensure evidence based planning, the APAP must be sufficiently informed of the current status within the sector. National and provincial research questions will be formulated to guide such situational analyses, per province and nationally
- The importance of this step stands at ensuring that identified interventions per Key Action Programmes (KAPs) are sufficiently informed of sector challenges. A situational analysis thus forms the baseline of KAPs identified by APAP e.g. Livestock Development?

Table 14: Step D – roles and responsibilities

Required outputs	Responsibility	Supporting agents	Timeframe (due date)
Performance report of Key Action Programmes (KAPs)	Lead directorate or agency of the Key Action Programme	PDAs, Sector organisations	Quarterly and annually, by June
Situational analysis of Agriculture, Forestry and Fisheries	DAFF – Directorate Policy Research	PDAs, Sector Organisations, ARC, NAMC	March - every 2nd year within MTSF period

7.2 APAP Monitoring and Evaluation

The table below reflects the key impacts areas expected from the key action programmes described within the document. A lack of improvement over time would point to a need for revisions to the plans so as to improve their impact.

Table 15: Monitoring and evaluation framework

Impact indicator	Baseline	2019 Target	Frequency of measurement
Increase in number of smallholder households	164 000 in 2012	400 500	Annually
Real increase in AFF GDP	R42,5 billion at constant 2005 prices in 2012	R48,9 billion at constant 2005 prices (or 2% real growth per year)	Annually
Real increase in value of AFF net exports	Annual average of R5,1 billion for 2008-12 at constant 2005 prices	R5,8 billion at constant 2005 prices (or 2% real growth per year)	Annually
Decrease in value of diesel, fertiliser and machinery imports for AFF	Annual average of R9,6 billion for 2008-12 at constant 2005 prices	R7,4 billion at constant 2005 prices (or 3% real decline per year)	Annually
Reduction in the share of households experiencing hunger 'sometimes', 'often' or 'always'	10,8% of households in 2012	8,0% of households	Annually
Increase in number of jobs in AFF	660 000 average for 2012	162 500 more jobs by q4 2019	Annually

Table 16: Monitoring and evaluation template per KAP

Key milestones	Indicators	Means of verification	Progress to date Q2 2014/15	Will deadline be met? (Y/N)	Reasons for deviation	Revised deadline	Implementation blockages/ constraints	Responsible person
Q4 2014/15 MCEP window designed for developing an incentive programme for smallholder farmers	Approved Smallholder Development Incentive Programme under MCEP	Signed off agreement with NT for the funding of the Smallholder Incentive Programme under MCEP	Meeting with NT on 25 February 2014 concluded to increase MCEP budget to accommodate new incentive programme for smallholders	N	Delays in NT approval	Q1 2015/16	Agreement with NT delayed	CD Development Finance

Appendix – Projected employment creation

The table below presents estimates of current employment levels in large-scale and small-scale primary agriculture and agro-processing, together with order-of-magnitude estimates as to the number of additional employment (and self-employment) opportunities created by 2019. Data sources included published information from commodity/industry organisations, as well as Stats SA's Quarterly Labour Force Survey and General Household Survey. Note: the existing employment levels do not add up to all existing jobs in primary agriculture and agro-processing, because the table does not seek to capture all relevant subsectors. Also, the table does not include subsistence producers.

	Existing				Additional as of 2019			
	Primary		Agro-processing		Primary		Agro-processing	
	Large-scale	Smallholder	Large-scale	Small-scale	Large-scale	Small-scale	Large-scale	Small-scale
Poultry	14,500	10,000	33,000	1,000	41,579	10,000	6,600	-
Soy + y. maize	130,000	500	25,000	-	50,000	20,000	5,000	-
Red meat	40,000	70,000	25,000	2,000	(5,000)	21,000	7,500	4,000
Wheat	28,000	200	5,000	-	3,800	500	3,000	-
Vegetables	132,500	42,185	20,000	200	26,500	40,000	3,000	2,000
Biofuels	5,000	-	200	-	30,000	25,000	6,000	-
Forestry	63,000	NA	52,000	22,000	12,600	NA	10,400	4,400
Aquaculture	3,000	-	3,000	-	3,000	-	2,000	-
Fetsa Tlala	NA	-	NA	-	NA	120,000	NA	15,000
Total	416,000	122,885	163,200	25,200	162,479	236,500	43,500	25,400

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